



Focus on Palm Oil

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Markets

Valuable Palm Oil Global Outlook for Soybean Case for GMOs in Poland Poland and Palm Oil Fertiliser Prices – Drivers and Direction Bad Case of Déjà Vu Time to End Injustice

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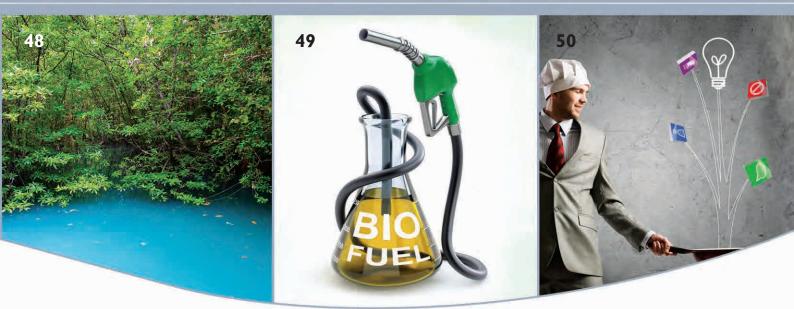
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Significance of the MSPO

Following a pilot programme in 2014, a number of large plantation companies received certification under the Malaysian Sustainable Palm Oil (MSPO) standard over the past year.

Further progress is being made in training auditors and conducting awareness sessions across the country. More plantation areas are also being certified.

Why is this significant? Establishing a standard was an important first step, but significant measures are being taken to ensure there is the capacity for the MSPO to be implemented and verified in an efficient manner.



This means that it can be adopted by the market in a costeffective way, adding to the growing sense that it will play a major role in the future of palm oil certification.

This development of capacity on the ground is essential. Its

absence would be akin to a government setting safety standards for vehicles, but not having the budget to let manufacturers and the public know of the changes, or to deploy an agency to enforce compliance.

And if safety standards are too strict, it would not improve the functioning of the transportation system. Most vehicles on the road would not meet these standards. Those that do, would be beyond the reach of most consumers.

This is precisely what gives MSPO a point of difference with the private-sector initiative that is the Roundtable for Sustainable Palm Oil (RSPO). Simply, it is the ability to have a large number of producers meet a broad range of standards that provide an assurance of sustainability.

The RSPO is an important and valuable player in palm oil certification, but its standard has at times proven to be simply too broad and too expensive for most small farmers to meet.

Pressure on palm oil

In this regard, too, the pressure on the palm oil supply chain to meet certification standards – and a specific standard at that – is unusual. There are few other commodities where this occurs.

Rice, for example, does not have any such standard, even with its relatively large greenhouse gas footprint because of methane emissions associated with wet rice farming. Consider the outcry around the world if small rice farmers were forced to meet demanding environmental standards that potentially affect their income and livelihood.

Some standards exist for coffee, such as Fair Trade and Rainforest Alliance certification, but the uptake for both is

relatively small and mainly confined to Western consumer markets. There is a general acceptance of specialty coffees to meet demand based on taste – and that is the overriding factor in coffee production.

Regardless of the reasons for the pressure on the palm oil industry to adopt standards in production, there is no reason to consider that it will go away. It is effectively the expression of an activist-driven desire in Western markets for assurance that products be produced in a certain way.

But what happens when those standards don't exist or those standards are too expensive for most producers?



What the MSPO represents

There has to be a level of realism and consensus in the construction of standards. That is why national standards – such as the MSPO – go through a lengthy procedure that adheres to international norms in standard setting. This avoids standards

heading into a world of ideal benchmarks and procedures that are not practical for most participants.

So, the MSPO effectively represents two things.

First, it represents the fact that certification for palm oil is maturing and consolidating. The RSPO has not been around for particularly long in the grand scheme of things. But it serves a particular market and a particular need, and it does it well.

Other benchmarks – such that of the Palm Oil Innovation Group (POIG) and Golden Agri-Resources Ltd (GAR) on High Carbon Stock (HCS) – are emerging. POIG suits a certain number of companies that are able to take that leap; GAR's HCS suits itself and other large vertically integrated producers. The MSPO similarly suits the Malaysian industry and specific national conditions.

Second, MSPO represents the qualitative difference between palm oil from Malaysia and the output of other producercountries. Just as there is a level of quality assurance that can be seen in, say, Australian beef, Japanese manufacturing and American innovation, there is a level of assurance in what can only be identified in the brand that is Malaysian palm oil.

This assurance extends from the well-recognised 'Malaysian model', underpinned by the idea that smallholders are benefiting from oil palm cultivation, and that high-quality downstream products are produced and marketed across the globe.

> Dr Yusof Basiron CEO, MPOC



(EU) take turns to hold the 'Presidency' of the bloc for six months. In January 2016, the Dutch government started its term and will drive the EU agenda up to July.

The Dutch government has shown recent signs that, as part of this agenda, it intends to push for greater scrutiny of palm oil that comes into Europe. This could mark the first time that the EU Presidency has made palm oil a strategic focus of its sustainability agenda. This is a significant move.

Foremost on the Dutch agenda will surely be certified sustainable palm oil (CSPO), and the relative sparsity of uptake by European buyers and manufacturers. The low uptake – which is causing discontent among palm oil stakeholders – is critical because of Europe's position in the sustainability debate.

Europe is the key source – really the only source – of NGO-approved palm oil demand. Much of the demand for CSPO certified by Western NGOs is a result of anti-palm oil campaigns and risk-averse companies that have invested considerable amounts in their branded consumer products.

Despite this, the uptake remains relatively low at roughly 50%; there is, as such, no premium on CSPO, even with higher production costs. However, there appears to be a new concerted policy push by both European governments and the private sector to increase the uptake of CSPO via regulation. This culminated in a new policy announcement by five European governments and a number of European bodies involved in palm oil. Late last year, the UK, the Netherlands, Germany, Denmark and France signed on to a commitment to support '100% sustainable palm oil production' by 2020. They also requested that the European Commission convene a session of member-states to examine the issue and policy options.

Non-trade goals?

This declaration indicates a political appetite among European policy makers and businesses – particularly in Northern European countries – for more stringent measures on palm oil.

It looks as though the Dutch Presidency of the EU will push broader trade and



environmental goals as well. Indeed, the Dutch trade minister indicated in a speech in December 2015 that the Netherlands would draft in the support of the private sector to push other non-trade goals.

This is not the first time that trade controls through regulation have been attempted in Europe, with the goal of supporting increased CSPO uptake (i.e. securing regulatory advantage for CSPO, or disadvantage for non-CSPO palm oil – which amounts to the same thing).

Dutch importers during the last Dutch EU Presidency lobbied for a reduced tariff on palm oil certified as sustainable – an effort that clearly would have run into problems with trade law and with trading partners in Southeast Asia. As a result, the proposed reduced tariff, which was effectively an increased tariff on non-CSPO palm oil, never got out of the gate.

A more recent attempt was made in Italy to introduce discriminatory regulations favouring CSPO – in this case, a tax on all non-CSPO palm oil – that was proposed as part of the Parliamentary budget process. Again, the proposal died straight away.

The Dutch Presidency appears to be drawing from three separate policy initiatives related to forestry that emerged from Europe over the past decade or so. These are likely the potential 'blueprints' that the Dutch effort could attempt to follow:

 The first was a UK procurement initiative that emerged around 2010 – this was effectively a voluntary measure that was instituted by the UK Department of the Environment, Food and Rural Areas.

The initiative worked with palm oil importers towards an aspirational target to have all palm oil going to the UK certified as sustainable by 2015. The initiative fell well short of its target and was disbanded after three years. However, the new initiative appears to have adopted almost the same approach.

 The second was in the Netherlands, which had a similar approach to that in the UK. This was known as the Dutch Task Force on Sustainable Palm Oil, led by the Product Board for Fats and Oils. It speaks on behalf of and provides services to the oils and fats industry and trade in the Netherlands.

Cover Story

While nominally a private-sector push, the task force relies on significant Dutch, Danish and Swiss government funding via the Dutch body IDH, also known as the Sustainable Trade Initiative. The Task Force has pushed for similar goals to the UK measures, i.e. to have all palm oil imported into the Netherlands to be CSPO.

- The third, and arguably most significant is the EU's Forest Law Enforcement, Governance and Trade (FLEGT) programme. It concerns for the most part the 'legality' of timber products exported to the EU. FLEGT has been a multi-million dollar programme with two significant policy measures.
 - One is the introduction of 'due diligence' rules for European importers.
 They must under threat of legal penalty assess the legality of any timber products they are importing.
 - Another is the establishment of an environmental trade agreement known as a voluntary partnership agreement. Under this, timber will only be exported to the EU if it meets a particular agreed standard for legality, which includes environmental regulations.

The EU is currently exploring the possibility of extending the FLEGT programme to other commodities imported by the region.

This is similar also to approaches taken in relation to conflict minerals on both sides of the Atlantic and, more recently, with reporting on policies in relation to child or trafficked labour in the State of California. In these cases, the reporting requirements are those that basically demonstrate that some level of risk management has been undertaken. However, the requirements make parties that are essentially innocent so paranoid about auditing that extreme levels of compliance are implemented that don't actually go towards solving any social or environmental problems.

Risks for trade

The three policies, in combination with the most recent announcement in the Netherlands, indicate that the EU is taking some sort of environmental trade control seriously.

This has not gone unnoticed. Efforts by the Dutch Presidency to implement the policies would risk disagreement with palm oil – producing countries – key trading partners for the EU in general, and the Netherlands in particular.

The bigger question is whether the EU is of the opinion that it can undertake these measures unilaterally in the light of recent policy initiatives in both Malaysia and Indonesia. Each has introduced government-backed sustainability standards for palm oil production. The Malaysian standard in particular follows national standards procedures and conforms to norms established in the International Standards Organisation.

Any move by the EU – or its memberstates – to push a private, nongovernmental standard – rather than recognise one that has been established by a sovereign government – could have further ramifications for European trade policy, and for any trade push by the EU into Southeast Asia's palm oil-producing region. The idea that the EU wouldn't to some extent recognise a standard established by one of its trading partners could be politically sensitive.

The EU recently announced a new trade strategy called 'Trade for All'. It looks to work towards a more responsible trade and investment policy. The policy states that Asia is crucial to Europe's economic interests; yet Asia appears to be something of an afterthought in EU foreign policy.

The EU-Singapore free trade agreement went ahead because there was nothing contentious in it; in some ways it can simply be considered an agreement on investment and services. The EU-Vietnam agreement negotiations concluded in December 2015; and there is still at least an 18-month legal review and ratification period ahead.

But the reality is that the EU's trade relationship with most ASEAN countries has stagnated. Still, as demand in Europe wanes, its manufacturers and service providers need greater market access in growing markets.

The only way this will happen is with careful and considered bilateral or multilateral engagement that covers national standards; EU trade regulations such as due diligence laws; and broader trade engagement.

If European countries want to determine which sources of palm oil can enter Europe and which can't, they must be made aware that this will encounter serious problems.

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'GREENER' PALM OIL FROM MALAYSIA

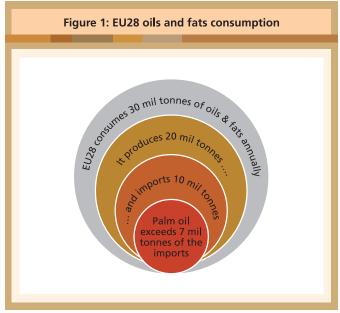
Going the extra mile

The 28 countries that make up the European Union (EU28) imported more than 7 million tonnes of palm oil in 2014. This represented about 70% of all oils and fats imported by the economic bloc (Figure 1).

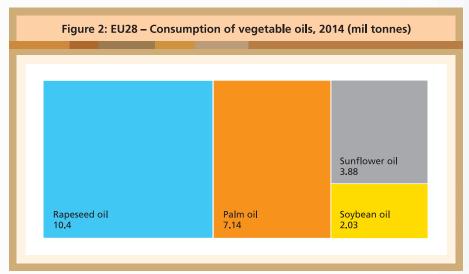
What does the EU do with that much palm oil?

By now you would know that palm oil and its derivatives go into anything from washing detergent and lipstick to shampoo and candles. It is a major ingredient in many of the things we eat. It makes your favorite chocolate spread yummy, keeping it from melting at room temperature. It also enriches animal feed.

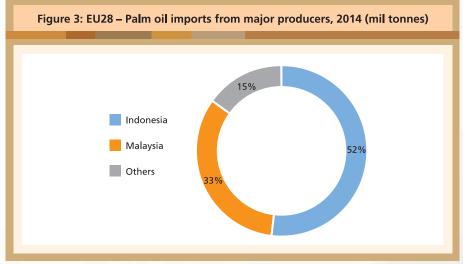
There is growing demand for palm oil as a source of energy. It is used for heating in some cases. But the bulk is for biodiesel that feeds the compression-ignition engine so popular in European cars.



Source: MPOC



Sources: Oil World Annual, 2014 & 2015



Sources: Oil World Annual 2014 & 2015; MPOC Brussels



The use of biodiesel in the EU is controlled through policies with the fundamental objective being to increase the percentage of renewable energy sources. The region follows this policy for environmental reasons, such as the reduction of greenhouse gases and of local pollution by exhaust emissions.

There are many reasons for the prominent position of palm oil. Its physical characteristics make it the ingredient of choice in many food applications. It enables a broad range of applications at an attractive price. Its use in kitchens is well accepted, especially in the countries of central and eastern Europe.

There is another justification for the widespread use of palm oil: the productivity of the oil palm. It yields about five times more oil per hectare of land than, for instance, rapeseed. For soybean, the comparison is roughly 10:1.

To replace the orange section in Figure 3, you would have to multiply the land used for rapeseed cultivation by four or five times. This is a virtual impossibility in the EU where competing demands for land are more intense than in most parts of the globe.

Green measures

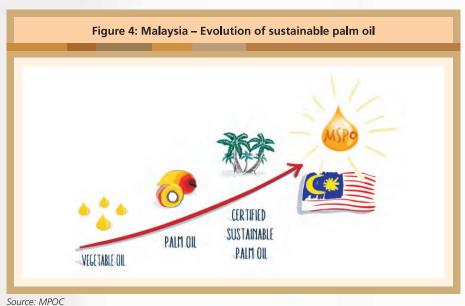
Malaysia supplies no less than 33% of the EU's palm oil imports, second only to

Indonesia. The oil palm has become a pillar of Malaysia's economic development, providing a steady stream of export revenue and improving the livelihood of citizens.

It stands to reason therefore that nobody with a stake in the industry would want to destroy it. Sustainable production of palm oil is in Malaysia s best interests. Malaysians have not only learnt to keep an eye on protecting the environment. They are also further along than most other producers of palm oil in accepting that sustainability is the key to the future.

The Malaysian government and palm oil have long industry implemented measures for the sustainable management of land used for oil palm cultivation. At the UN Earth Summit in Rio de Janeiro in 1992, the country had committed to retaining 50% forest cover over its landmass. It has kept its promise. No small achievement.

Plantation owners go the extra mile to protect the environment in which they operate. Sustainable practices include a 'zero burning' policy pioneered in 1985. Another is application of mulch from the fruit wall surrounding the kernel to refertilise the soil. This cuts down the use of chemical fertilisers.



On plantations, rodents like the common rat cause considerable damage to oil palm fruit. So growers have introduced barn owls to keep the rat population in check while reducing the use of pesticides.

evolution of sustainable palm oil – for the benefit of Europe and the rest of the world.

MPOC Brussels

All the principal players in the Malaysian palm oil industry are members of the Roundtable on Sustainable Palm Oil. Its certification is the widely accepted international standard for sustainable palm oil.

The Malaysian government is adding to the volume of responsibly produced palm oil. It has introduced the Malaysian Sustainable Palm Oil (MPSO) standard, to enable the participation of smallholders. The first MPSO licences were issued in January 2015, thereby continuing the

Green Canopy Widens

Latest data

ore than 190 countries met in Paris in December 2015 on the occasion of the United Nations Climate Change Conference and reached a deal to address the issue of climate change. As always, forests and emissions from deforestation received attention throughout the conference.

In this context, it is important to draw attention to the latest report from the UN Food and Agriculture Organisation (FAO). The report is known as the 'Global Forest Resources Assessment (FRA) 2015' and is entitled 'How are the world's forests changing?'.

The FRA is the most comprehensive global examination of forests, taking data from hundreds of sources and using teams of researchers from around the world.

Many NGOs have accused the palm oil industry of being a major cause of deforestation, particularly in Malaysia. This has been one of the key pillars of the campaigns to discredit palm oil. But the new data from the FRA changes this. Malaysia, one of the major players in the palm oil industry, is doing pretty well in terms of managing its forest resources.

Indeed, today Malaysia's forest area is 22,195,100 ha or 67.6% – more than two-thirds – of the land area. In 2000, the area was 21,591,000 ha. Between 2010 and 2015, the forest area has risen by 14,000 ha/year.

In other words, Malaysia's forest area is increasing, not decreasing.

Note that primary forest is 5,041,100 ha or 22.7% of the forest area; other naturally regenerated forests are 15,188,000 ha or 68.4% of the total area; and planted forests represent 1,966,000 ha or 8.9% of the forest area.

Even when looking at forest cover – which calculates forest canopy cover and includes smaller blocks of trees – Malaysia's numbers are impressive. Global Forest Watch, established by a US NGO, says Malaysia's forest cover is around 29,000,000 ha – upward of 80%. Malaysia's numbers are all the more remarkable following the past 25 years (from 1990 to 2015), when the global forest area continued to decline gradually as the world population continued to grow.

The positive aspect is that, as noted by the FAO report: 'The focus on sustainable forest management has never been so high: more lands are designated as permanent forest, we have established more action and monitoring, reporting, planning, and stakeholder and involvement is greater every day, and there is an almost universal legal framework legislating on sustainable forest management. Larger areas are designated for the conservation of biodiversity and simultaneously forests have an increasingly important role in offering products and services.'

The authors also note that in 1990 the world had 4.128 billion ha of forest; in 2015, this area decreased to 3.999 billion ha, bringing the terrestrial coverage rate down from 31.6% to 30.6% in 25 years.

From this point of view, Malaysia sets a good example. Its forest area has

"Malaysia's forest area is increasing, not decreasing."

decreased only slightly over the past 25 years. The rate of its forest loss has effectively fallen to zero. The decrease in Malaysia's forest area is smaller than the losses in developed countries such as Australia and Canada.

Malaysians should be proud because one of the main features highlighted by the report is that: 'The total forest area reported as primary has increased from 1990 to 2015, largely because more countries now report on this forest characteristic. Some countries have reported increases in national primary forest because old-growth forest categories have been reclassified (e.g Costa Rica, Japan, Malaysia, Russian Federation and the US).'

Finally, while the world also focuses on conservation of biodiversity, considerable progress has been made in this regard, since the area designated for biodiversity conservation in Malaysia rose from 1,120,000 ha in 1990, to 1,859,000 ha in 2015.

Hard work involved

There will be detractors in relation to the findings of this report. Some will claim

that the use of 'forest area' by the FAO is not as reliable as 'forest cover'. But there is a reason for this.

'Forest area' is a longer term measure of land area that is classified as forest over a longer term.'Forest cover' is a snapshot of one point in time. 'Forest cover' is subject to disturbances, man-made or otherwise. Think of forest fires, volcanoes, diseases or clearance for environmental purposes such as fire breaks.

But it is also worth noting that a number of OECD countries such as Canada, Australia and Chile had larger forest area losses than Malaysia over the past 25 years.

After reading all these numbers, it is surprising that some continue to spread the rumour that Malaysia suffers the terrible effects of deforestation. As an observer at the Roundtable on Sustainable Palm Oil, I am obviously very interested in all of this data. This is a sign that, contrary to what some seem to believe, Malaysians take care of their forest and are aware of this precious national heritage. Malaysia should therefore be lauded. Far from the environmental pariah that some have accused it of being, it is a country that has worked hard to manage its natural resources sustainably.

In summary, the key facts from the FAO report are:

- Malaysia's forest area is increasing, disproving the accusations of unregulated, indiscriminate mass deforestation.
- Malaysia remains one of the world's best performers in retention of forest. Its forest area currently stands at 67.6% of the land area.
- Globally, the news for forests is also improving: biodiversity conservation areas are increasing; and the global rate of forest loss is declining.

Pierre Bois d'Enghien Agronomist Engineer & Agricultural Expert Dr Jean Graille, a world renowned biotechnology expert who focuses on fats and lipids, completed his studies at the Ecole Nationale Supérieure de Chimie de Marseille (National Chemical Engineering Institute of Marseilles). He began working as a researcher at the Institut des Corps Gras (Institute for Fats and Oils) before continuing his career in the Agribusiness Programme of CIRAD, where he managed the team for 'Food and Non-Food Substances – Lipid Technology Sciences'. Dr Graille won the Chevreul medal in 1997 and went on to receive the Kaufmann Prize in 1999 – the first French person to do so.

In an interview, he examines the French view of oils and fats, including palm oil. He also dismantles the myths perpetuated by the anti-palm oil lobby, and issues the timely reminder that there is no justification to avoid the use of this important commodity.

In your opinion, do the French have an adequate understanding of oils and fats?

Absolutely not! Like all global consumers, the French are far from having a good understanding of foods that are commercially available to them, and fats and oils are no exception.

Two statements are often made to illustrate this point:

Valuable Palm Oil No reason to avoid using it

- 'Butter contains more fat than sunflower or canola oil.' Not true! Butter contains 20% water. It is a water-in-oil emulsion containing 80% fat, whereas sunflower and canola oils contain 100% fat.
- 'Olive oil contains more fat than hazelnut oil.'
 Wrong! Both consist of 100% fat.

However, it is interesting to note that both beliefs come from sensory perceptions and have to do with the appearance of these products and how they feel in our mouths. Beliefs based on sensory perceptions have nothing to do with scientific evidence.

"Palm oil is completely free of trans fats. It contains a balance of saturated and unsaturated fatty acids."

'Tobacco and alcohol are deadly';'It is dangerous to consume too much sugar';'You need to exercise and eat 4 to 6 servings of fruit or vegetables per day and avoid eating too much fat'; 'Oils containing omega 3 and 6 are healthy' – these are accurate claims supported by scientific research.

The following two beliefs are not backed by scientific evidence and lead us toward misinformation:

- 'Palm oil is responsible for cancer and cardiovascular disease because it contains a lot of saturated fats.'
- 'Palm kernel oil is also responsible for these types of disease.'

Unfortunately, consumers assimilate this information; and although few of them read the labels on food items on the shelves, these types of claims grow to unfairly demonise an entire segment of the agro-food industry. The idea that something may damage your health is a powerful factor in the spread of false information.

Two Belgian Senators, Sabine de Bethune and Cindy Frassen, proposed to limit the content of palm oil in food products to 2gm per 100gm. They have argued that using palm oil is as dangerous as using trans fats. Is there any evidence for this claim? What negative effects could there be from the Senators' proposal to limit palm oil?



There is no scientific evidence that supports the Honourable Senators' comments. However, there is plenty of research and global scientific literature that demonstrates that the regular consumption of trans fats is dangerous. Scientific studies all lead to the same conclusion: the consumption of trans fats induces cardiovascular disease and cancer, particularly breast cancer. Palm oil is completely free of trans fats. It contains a balance of saturated and unsaturated fatty acids and its consumption is not linked to any form of cancer.

When the Honourable Senators proposed to limit the content of palm oil, they were undoubtedly confused with

Markets

the decision by several EU member-states to limit the content of trans fats in fats and oils; in fact, Denmark has set this limit at 2%.

Note that palm oil is a natural product that does not cause health problems, given its unique chemical structure. Furthermore, palm oil contains Vitamin E and is the most significant source of tocotrienols, which offer protection against cancer and are pro-Vitamin A.

Finally, do not forget that we need saturated fats as our cell membranes must be very fluid in order to allow waste to exit and nutrients to enter our cells. Mother Nature designed the lipid composition of cell membranes to include a precise and smart ratio between saturated, monounsaturated and polyunsaturated fats.

These simple reminders show how sorely mistaken these two Honourable Senators are in tabling such proposals and engaging in scare-mongering.

Another Belgian senator, Muriel Targnion, has stated that the consumption of palm oil increases the risk of breast cancer. Is this true?

Absolutely not! Senator Targnion makes an erroneous statement when citing the joint report by the Institut National de la Santé et de la Recherche Médicale and the Institut Gustave Roussy. The joint report published by these two research bodies finds that trans-oleic acid and trans-palmitoleic acid are suspected of causing cancer – especially breast and colorectal cancer – but Senator Targnion erroneously claims that these fatty acids are found in palm oil. This is completely false! Like all common vegetable oils, palm oil does not contain trans fats. Only partially hydrogenated (i.e. processed) soybean and canola oils contain trans fats in significant amounts.

It should be pointed out that the trans fats referred to by Senator Targnion are found in products of ruminant origin, in particular in dairy products such as butter, cream and cheese, as well as in the fat found in meat. These trans fats are a result of natural hydrogenation caused by the anaerobic microbial flora inside the stomach of ruminants.

What Senator Targnion should have pointed out was that palm oil is the only oil that contains tocotrienols, which are believed to offer strong protection against cancer, especially breast cancer. Many medical research studies have been performed on tocotrienols from palm oil and all have demonstrated good protection against cancer, including breast cancer. Some studies have even shown a clear association between palm oil consumption and cancer remission.

Swiss MP Dominique de Buman claims that rapeseed oil produced in Switzerland is healthier than palm oil. Is this true? He believes that rapeseed oil and butter could easily replace palm oil in food products in Switzerland. What are the benefits of using palm oil, and what are the potential risks for Swiss consumers of replacing palm oil in their food?

His statement is not scientifically acceptable. The best option for consumers is to make use of a range of oils and fats to ensure a balanced intake of saturated fats as well as omega 9, omega 6 and omega 3 fats.

"The complete replacement of palm oil in food products is unwelcome because it will change the taste of foods and it will also lead to Swiss consumers consuming dangerous trans fats." In fact, all fats are not equal and all have their advantages and disadvantages. Rapeseed oil contains all types of fatty acids and in particular linolenic acid (omega 3), which is also found in soybean oil and oils derived from nuts. However, this makes it sensitive to oxidation and heat. This is why scientists advise to consume this oil fresh because the combination of oxidative and thermal effects generates unnatural toxic molecules.

This is also why it is recommended to use a far more stable oil, like palm oil, for frying and to prolong the shelf-life of foods. Palm oil also has numerous other qualities; it is a 'naturally hydrogenated' oil that is free of trans fats and is free of genetically modified organisms (GMOs). In addition, palm oil's unique physical properties make it very attractive for a wide range of food applications to accentuate the taste and texture of foods. It seems that while MP de Buman wants to stop using certain types of imported products in order to further promote the rapeseed and dairy industries, he has not fully considered the implications of his erroneous statement on the health of Swiss consumers.

In light of the remarks made by Belgian Senators de Bethune, Frassen and Targnion and Swiss MP de Buman, do you think that certain people may be guilty of making alarmist claims regarding palm oil?

Unfortunately, yes. Certain people have taken advantage of their own position to make alarmist claims while certain members of the anti-palm oil lobby have an interest in denigrating the image of palm oil so that other vegetable oils or dairy fats may benefit.



The preparation of margarine containing suitable quantities of sunflower oil, rapeseed oil and palm oil is a perfect example of products that offer a balanced intake of the four types of natural fatty acids.

Regarding the comments on butter, on the nutritional level, butter contains many short fatty acids that are quickly metabolised to make energy, but also very long chain fatty acids that have been found to cause cardiovascular problems. The complete replacement of palm oil in food products is unwelcome because it will change the taste of foods and it will also lead to Swiss consumers consuming dangerous trans fats. However, this is a dangerous game and may ultimately result in more damage to competing vegetable oils, if a malicious campaign were to be launched against these oils evoking the dangers of GMOs and their inferior yields resulting in the need to deforest 10 times more land to produce comparable amounts. Specifically, soybean has resulted in the loss of 10 times more biodiversity in the Amazon than the cultivation of oil palm.

What are trans fats? Do these relate to palm oil?

Let us start by reiterating that palm oil does not contain trans fats. In their natural state, these can be found in the fats of ruminants and therefore in milk and dairy products. However, they are present in small amounts. They are formed through the

Markets

partial hydrogenation of unsaturated fatty acids in the rumen of cattle by the microbial flora inside this organ.

Trans fats are also found in partially hydrogenated oils – but in significant amounts. Thanks to the use of naturally hydrogenated oils like palm oil – which is entirely trans fats-free – we have been able to develop a wide range of margarines, spreads and cooking fats that do not contain hydrogenated oils.

You wrote a scientific paper entitled 'Palm oil, another point of view'. Could you give us a brief summary?

The key point in this paper is the observation by biochemists and organic chemists, applying their knowledge of living systems they have studied for more than half a century. Vegetable oils such as palm oil and cocoa butter, which are widely consumed and rich in saturated fatty acids, are not unhealthy under normal consumption conditions.

Oils known as lauric oils, such as palm kernel oil (from the nut of the oil palm fruit), contain 90% saturated fatty acids – 80% of these are short chain fatty acids and they are a special case in terms of digestion. Because of their short chain fatty acids, they cross the intestinal wall very quickly and are transported directly to the liver by the portal vein to make energy. Thus lauric oils have a neutral impact on cardiovascular disease and cancer.

Regarding the myths surrounding palm oil, what are the key points that French consumers need to remember about palm oil and its effects on health?

Consumers need to remember that scientific researchers consider refined



palm oil as having a neutral or positive effect on health; its saturated fatty acids are not dangerous; it contains a small amount of compounds such as carotenes, tocopherols and above all tocotrienols that have a powerful protective effect against cancer and cardiovascular disease.

Palm oil is a valuable ingredient for the European food industry because it enables an enormous range of manufacturing processes at a lower cost and at no health risk to the consumer.

In your scientific paper, reference is made to the anti-palm oil lobby and the ridiculousness of the current debate. What is your opinion of the demonisation of palm oil by certain players in the retail sector?

Palm oil has been targeted unfairly in a campaign to demonise it, primarily through activities of the anti-palm oil lobby that can be clearly identified – namely, sunflower and canola for Europe.

In fact, palm oil is the most popular vegetable oil in the world with global production in 2012 having reached 51

million tonnes compared to 41 million tonnes for soybean, canola (23 million tonnes) and sunflower (14 million tonnes). This supremacy in the global market has not pleased producers of competing vegetable oils.

Those in the anti-palm oil lobby know that it is very easy to make false claims about a certain topic and target these claims at uninformed consumers, who quickly assimilate them to become accepted beliefs. Once disseminated, these claims can only be countered and eradicated by a laborious process of education centred on the promotion of scientific facts.

Communications professionals know very well how this works and – in an age where correct and false information can circulate globally in real-time thanks to the Internet, television and newspapers – it has become extremely easy to reach out and cause alarm among a great number of consumers by providing them with 'information' on a particular subject. This is particularly effective when a supposed health-risk is emphasised and associated with the consumption of a particular product. In the case of the anti-palm oil lobby, the misinformation activities reach their apex when major television channels decide to address a topic like 'the effect of palm oil on human health and the environment' and provide a platform for doctors who are self-professed 'nutritionists' or to environmentalists who try to educate us on 'healthy living' or how to be responsible citizens.

In France, the success of such communication or misinformation campaigns did not go unnoticed by players in the retail sector who distribute products containing palm oil. Given the significant financial interests at stake, they saw the attacks on palm oil as an opportunity to promote their own range of 'palm oil-free' products.

Under the pretext of consumer health, which remains paramount, certain brands took 'social action' by declaring that they would no longer offer any products containing palm oil to their customers. In doing so, the brands believed that they had regained their credibility and increased their influence on customers through cheap, opportunistic advertising.

France is famous for having banned genetically-modified agriculture. Do you think that most French consumers know that palm oil does not contain genetically modified organisms (GMOs)?

Palm oil has the advantage of not containing GMOs. The oil palm has been improved through traditional breeding selection techniques. In Southeast Asia, the palm species *Elaeis guineensis*, originally from West Africa, has been successfully cultivated. There are extremely high yields per hectare, often exceeding 4 tonnes in certain areas. To this day, palm oil has never been produced from transgenic crops. On the other hand, soybean, canola and corn oil from both the North and South American continents likely come from transgenic crops.

Why do food producers like palm oil so much?

Palm oil is a key ingredient because it has many desirable qualities. For instance, it is used to give certain foods a specific texture and consistency. In addition, palm oil is popular because it requires limited processing and stands up well against the thermal and oxidative stress that is encountered during cooking and frying; this is due to the fact that it contains few polyunsaturated fatty acids which are very sensitive to heat and oxygen.

Palm oil also gives foods a longer shelf-life as its tocopherols (Vitamin E) and tocotrienols (Vitamin E analogs) protect against thermo-oxidative degradation.

Why do food manufacturers prefer palm oil and its derivatives to hydrogenated oils (soybean and canola)?

Producing goods with palm oil or its derivatives results in products that are more stable without any 'off' flavours or unpleasant odours when cooking or reheating; this is not at all the case when shortenings manufactured from liquid oils are used.

In essence, industrial manufacturers prefer palm oil and its derivatives because these provide a broader range of applications at a lower cost – for instance, very specialised stearins are obtained through fractionation of palm oil. Cocoa butter equivalents (CBE) are produced with thermoplastic characteristics identical to cocoa butter. CBE cost five to 10 times less than cocoa butter and are very important from a technical point of view. The European Union has authorised the use of CBE in cocoa butter by up to 5%.

Excellent 100% CBE chocolate can be found in Malaysia, which is not surprising because the cocoa is what gives the flavour – not the fat, which only provides the 'melt in the mouth' sensation due to the properties of cocoa butter or CBE.

What do food manufacturers and retailers need to do in order to prevent the spread of misinformation on fats and oils in France?

Unfortunately, the spread of incorrect information and misinformation is a serious problem. While it is true that it is more complicated to provide information on a formulated food that contains 10 to 20 different ingredients than on a basic product, producers can counter the spread of misinformation by providing scientifically accurate information on their labels.

The Oil Palm, Oct 25, 2015



Global Outlook for Soybean Eye on four factors

2015 has certainly been an interesting year for the world soybean industry. Argentina, Brazil and the US all produced record crops with global supplies vaulting from being relatively tight to the largest in history. Farmer profitability largely dissipated as cash prices fell from well over US\$10/bushel to less than US\$8/bushel in some areas.

It is worthwhile to look at what 2016 may bring to the sector. Weather events will likely have more impact on the market than any other factor, but other unforeseen issues will also have an effect.

Among these could be the global and national economies as well as disputes, politics, labour strikes, elections and perhaps even armed conflicts among nations. Four factors could be particularly influential.

Increased weather problems

For the most part, the world's major soybean producers have enjoyed good weather over the last three years. The US has seen above-average soybean yields during that time-frame with record yields last year and again in 2015.

Argentina produced a record soybean crop of 60.8 million tonnes in 2015, and

Brazil has harvested three record soybean crops in 2013, 2014 and 2015. The only major country that has seen major soybean crop losses because of poor weather has been India. Even with record growth in world soybean consumption of 23.51 million tonnes in 2014/15, global stocks have increased because of the record production.

One or more of the major soybeanproducing countries will likely not enjoy such favourable weather in 2016. It already is drier than normal in northern Brazil, which has delayed planting of the crop to be harvested next year.

An *El Niño* weather pattern such as the one currently in place typically provides southern Brazil and Argentina with good rains during their growing season, but northern Brazil has experienced drought at times. If that occurs as some Brazilian weather forecasters are predicting this year, it may have a major impact on yields in the states of Mato Grosso, Para, Tocantins, Rondonia, Maranhao and Piaui. This could substantially reduce Brazil's 2016 soybean crop.

The US too is unlikely to see the same positive weather in 2016 that it did in the

last three

years. The *El Niño* tends to bring increased rainfall to California, which would be a very positive outcome. However, the *El Niño* is also associated with dryness in the eastern Corn Belt and Southeast.

If that is the case in 2016, the US will likely see a significantly smaller soybean crop. Additionally, if the current *El Niño* shifts to a *La Niña*, it could especially cause lower rainfall in the eastern Corn Belt, given prior patterns for this phenomenon.

Global palm oil production is likely to be negatively impacted as well by the *El Niño*. This is because less rainfall is normally received during this type of weather event in Malaysia and Indonesia, the world's top palm oil-producing nations. If palm oil output does decline, it will be positive for soybean oil demand and other competing vegetable oils.

Use of less crop inputs

For the last few years, the world's soybean farmers mostly have had a profit maximisation mindset because of high prices and the potential for high profits. As a result, they tended to use more fertiliser, better seed and additional crop protectants to maximise yields.

Now that soybean prices and profitability have sharply declined, farmers are likely shifting into a risk minimisation attitude. This will tend to cause producers to reduce their financial outlays by using less fertiliser and possibly fewer crop protectants.

There is evidence that this already has occurred with farmers in South America who are in the midst of planting their next soybean crop. Because of the use of less inputs, there is a likelihood that soybean yields in 2016 will be below those in 2015.

Liquidation of Argentine soybean stocks

Because of Argentina's 30% inflation rate and 25% export tax on soybean, farmers there have chosen to store an inordinately large share of their production, mostly in silage bags.

The USDA estimates that Argentina's farmers will have 14.59 million tonnes (536 million bushels) of soybean on hand at the end of March 2016; the country's ending stocks in the past have normally been less than 4 million tonnes (145 million bushels).

Argentine farmers are retaining their stocks as they expect the government will devalue the peso in the next few weeks or months and are hoping President-elect Mauricio Macri will sharply reduce the export tax on soybean as he promised after taking office on Dec 10, 2015. Both of these actions would boost the number of pesos farmers would earn from selling their soybean and encourage them to sell more. If Argentina's farmers do sell a large share of their soybean in a relatively short period of time, there could be a strong drop in global prices. Most of the soybean likely will be sold to the country's soybean processors to crush for export. Thus, most of the impact would be on global prices of soybean meal and soybean oil.

However, soybean prices also could be substantially affected. The likelihood is that most of the stock liquidation will occur in the first quarter of 2016. US farmers should be very leery of having large amounts of unsold soybean supplies when Argentina's farmers begin to sell their holdings.

Indian soybean imports

India has seen its soybean meal consumption surge from 1.02 million tonnes in 2006/07 to an estimated 5.22 million tonnes in 2015/16. The result of this and declining soybean production has been a drop in its soybean meal exports from a high of 5.29 million tonnes in 2007/08 to a projected 700,000 tonnes in 2015/16.

Domestic soybean meal consumption is expected to continue to grow rapidly in the future as a result of rising income and increasing consumer demand for poultry meat and farm-raised fish, which are fed with soybean meal.

It will be very difficult for India to substantially boost its soybean production due to lack of land and competition for farmland from other crops. Therefore, it is certain that India must soon import additional soybean or soybean meal to supply its growing domestic demand.

Reportedly, Indian firms have already contracted to

import some soybean meal this year from the Ukraine and China. As it stands now, the Indian government does not allow the importation of biotech crops or their derived products. Therefore, importers can import only non-biotech soybean meal, which is far more expensive than that made from biotech soybean.

The Indian government will likely change its policy sometime in 2016 to allow the importation of biotech soybean meal and possibly biotech soybean for processing. Prime Minister Narendra Modi has spoken very positively about biotech crops. The government also is being advised by a wide array of scientists to embrace these crops, including permitting their domestic cultivation. Therefore, it makes sense for it to now allow biotech imports as a first step toward sanctioning actual production of such items in India, in order to better supply the market with commodities like corn and soybean.

Of course many unanticipated events likely will occur that will have a major impact on the markets for soybean and its products, although they are simply unknown at this point. That is what makes the future interesting.

> John Baize AG Review December 2015, World Perspectives Inc

This is an edited version of the article.



In 2015, we considered two important proposals put forward by the European Commission (EC) on genetically modified organisms (GMOs). The first dealt with allowing member-states to ban or restrict the cultivation of crops containing GMOs in their own territory, while the second addressed the issue of GMO use and trade in the EU countries.

Probably no other phrase today raises so many doubts within European societies as 'GMOs'. Everything connected to genetic engineering evokes a wide range of emotions; hence the topic is very delicate and controversial.

However, we can't deny the fact that genetic engineering has been present in our lives for many years and cannot be completely abandoned. While Europeans in general accept the use of GMOs for production of drugs and vaccines, for example, people are still afraid of genetically modified crops and feeds.

Public opinion overflows with publications demonising GMOs and suggesting that they are harmful. The facts – proving that GMOs are no more harmful for humans and environment than natural organisms – are a drop in the ocean and cannot get through to our citizens. Professional academic bodies are unable to calm down people who perceive genetic engineering as a threat to natural ecosystems.

As Members of the European Parliament, we cannot disregard opinions from both sides of this conflict. We are aware of our responsibility in constructing European legislation and its influence on health and protection of environmental biodiversity. The laws we are trying to create cannot rely on common views but have to be based on reliable scientific data, even when it differs from opinions manifested through different political actions.

In the EU, food, feed and crops containing GMOs have to be labelled, while the list of approved GMO products can be found on the EC website. Most of them are made of corn and soybean, whereas in the field of cultivation the only approved genetically modified plant is the MON810 corn (resistant to pests – particularly the European corn borer).

The European Food Safety Authority is responsible for giving permission for every single genetically modified product. At the beginning of 2015, the European Parliament accepted a directive which gave member-states much more freedom in making decisions about cultivating genetically modified crops in their territory. According to the rules that came into force in April 2015 every EU country decides if modified plants pronounced safe can be grown on its land. Currently, in most of the member-states including Poland, cultivation of genetically modified crops is not permitted.

But the EC wanted to go further. Last October, the European Parliament worked on a proposal suggesting even stricter limits in the matter of GMO use. The introduction of this could end with giving member-states control not only in regard to cultivation, but also in allowing or banning GMO trade and usage.

Of course we rejected the EC project since it was not only unreal, but also dangerous. Despite the fact there is no real possibility to implement such rules on the European single market – as it would trigger border controls between countries approving or disapproving GMOs – it is necessary to emphasise that these restrictions would cause terrible harm to European agriculture.

Socio-economic impact

Nowadays, the most important matter in the discussion is the influence of GMOs on health and the environment. In this constant dialogue we can barely hear voices referring to economic issues, yet they are essential.

If we took a closer look at animal feeding and production, we could observe the enormous social and economic consequences such restrictions would have. Livestock farming is the sector that would suffer most and, among others, Polish society would pay a very high price for these limitations.

Poland is the biggest poultry producer in Europe. The basic ingredients of feeds used in poultry production are protein components, mostly soybean meal produced from the beans. Our national production was not and is not able to handle current demand; therefore Poland imports about 2 million tonnes of soybean meal per year, mostly from South America.

About 98% of the meal is made of genetically modified soybean, which is 20-30% cheaper than 'GMO-free' soybean. The cost of feed alone constitutes about 60–70% of the poultry production

costs. At the moment there is no way to replace modified soybean and, without it, Polish poultry production will not be as competitive as it is now.

Moreover, the market shortages will be filled with Asian and American poultry in an instant. Scientists agree that imports will be more expensive and the imported meat will be produced from transgenic feeds. There is a reasonable concern that our domestic production will not only be ruined but also replaced with more expensive poultry, fed with GMOs forbidden in Poland.

This will lead to destruction of our important agricultural sector on the one hand; and on the other, it will not protect consumers from eating food produced with GMOs. This is a vicious circle.

Predictions are not optimistic at all. The EC has not had its last word yet and, according to Polish law, genetically modified feeds can only be used until Jan 1, 2017. After that, unless the legislation changes, the production, trade and usage of modified feeds will be forbidden.

The opinion of the Polish government is commonly known, and it differs from the EU regulations. Politicians from the Law and Justice Party have opted for stringent laws. In proclaiming a 'GMO-free Poland', they risk suffering international legal consequences, but theoretically they are the voice of our society which is reluctant to accept GMOs. Naturally, we have to listen to *vox populi*, but first we need to inform the entire population.

Support gained by scaring citizens is a political deception and using the electorate's lack of knowledge to create law will only result in more trouble and is inherently dishonest. Meanwhile, trustworthy research approves the safety of GMO feed. Unfortunately, at the moment expert opinion is not enough to sway citizens.

Source: New Europe, Jan 4, 2016

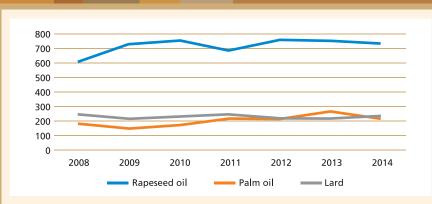
Poland and Palm Oll A blossoming relationship

Poland has succeeded in its journey to join the ranks of modern, market-based economies over the past 25 years. With a population of close to 40 million and GDP at purchasing power parity of around US\$800 billion, Poland now ranks sixth in Europe in terms of population and economic prowess.

Still, per capita income remains below the EU average. Other problems include an inefficient commercial court system, rigid labour legislation and a heavy tax system.

A look at Poland's oils and fats sector shows that rapeseed oil is the frontrunner in the production and consumption of vegetable oils. According to *Oil World*, the country produced nearly one million tonnes of rapeseed oil in 2014 and consumed around 738,000 tonnes of this. That year too, palm oil at 214,500 tonnes, replaced lard for the first time as the second-highest consumed product (Figure 1).

Figure 1: Poland – oils and fats consumption (thousand tonnes)



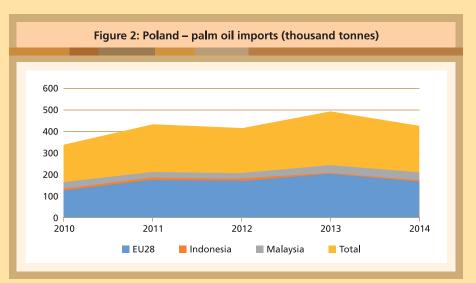
In 2014, palm oil was the primary vegetable oil imported, accounting for almost 32% of the oils and fats import volume. Much of this originated via the EU28, mainly Germany and the Netherlands. Malaysia has been able since 2010 to increase its participation slightly (Figure 2).

Imports of palm-based products grew about tenfold between 2012 and 2014 (Figure 3) – it doubled for palm oil; more than quadrupled for palm kernel oil; and skyrocketed for 'Other Products' from 101 tonnes in 2012 to an astounding 77,115 tonnes in 2014. Compared to 2013, this was an increase of more than 213%.

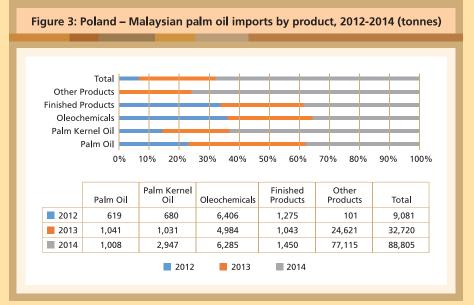
While palm oil imports into the EU28 grew at a rate of 22% from 2009 to 2013, they rose no less than 77% in the case of Poland. A range of positive factors speaks for greater trade engagement between Malaysia and Poland, considered one of the most robust economies in central Europe.

Poland has managed to sail through the Euro crisis relatively unscathed. Its good infrastructure makes it a preferred place for international trade, in particular via the large and modern port of Gdansk on the Baltic Sea. Strategically located in the heart of Europe, the port lends itself as a gateway for palm oil imports – both to eastern and central Europe, and to the EU.

Uthaya Kumar Regional Manager, MPOC Brussels



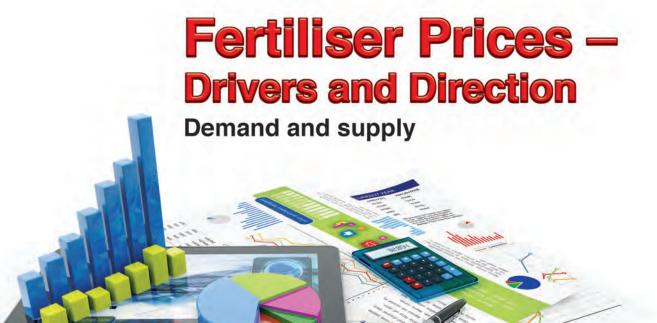
Sources: Oil World Annual 2013, 2014 & 2015



Source: MPOB







In its 2015-2019 forecast, the International Fertiliser Association (IFA) included significant capacity additions for fertilisers in all nutrient sub-segments. Over the five-year time-frame, the IFA expects the total fertiliser supply to rise by 47 million tonnes on a nutrient basis. The increase is carried across nitrogen (+16%), phosphates and potash (+17%).

The extent to which planned capacity additions are realised depends on various factors, including construction delays and access to (project) financing. Especially in recent years, emerging supply and resultant product price projections have also proven to slow down/cancel new projects.

Even when possible delays and cancellations are taken into consideration, completion rates could still be close to projected levels, putting downward pressure on fertiliser prices.

Crude oil versus fertilisers

Since the summer of 2014, crude oil prices have declined significantly. The

combination of greater supply (shale, OPEC, etc) and weaker demand from emerging markets pushed crude oil prices about 50% lower.

For 2016, the US Energy Information Administration (EIA) assumes that production will continue to exceed demand, sustaining an overall surplus. Inventories have been building throughout 2015, but that will level off if production growth subsides as expected. As far as prices are concerned, the EIA forecasts WTI crude in 2016 will average US\$51.31/barrel versus US\$49.88/barrel in 2015.

Low oil prices and (subsequent) low natural gas prices have pushed down the production cost of fertilisers, as well as their delivered cost through lower raw material and shipping costs. While supply and demand remain the most important price drivers for fertilisers, especially nitrogen varieties, they do generally correlate (modestly) with energy prices.

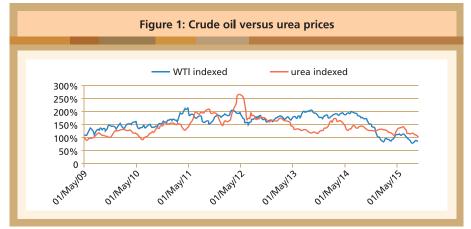
Table 1: Fertiliser Nutrients – Supply and Demand (mil tonnes)								
		2015	2016	2017	2018	2019		
Nitrogen	Supply	153.8	159.5	165.0	170.4	174.4		
	Demand	143.8	147.3	150.7	153.7	156.6		
	Stocks/Supply	6%	8%	9%	10%	10%		
Phosphates (phosphoric acid)	Supply	46.0	47.3	48.5	50.1	51.1		
	Demand	43.7	44.8	46.2	47.3	48.2		
	Stocks/Supply	5%	5%	5%	5%	6%		
Potash	Supply	44.0	45.4	47.5	49.9	51.8		
	Demand	35.5	36.5	37.6	38.6	39.5		
	Stocks/Supply	19%	20%	21%	23%	24%		

Sources: IFA, WPI

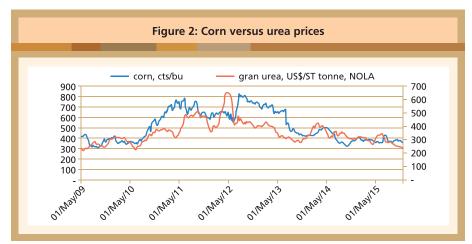
As 2016 energy prices are expected to be fairly stable from current levels, their impact on fertiliser markets should be considered neutral.

General demand projections

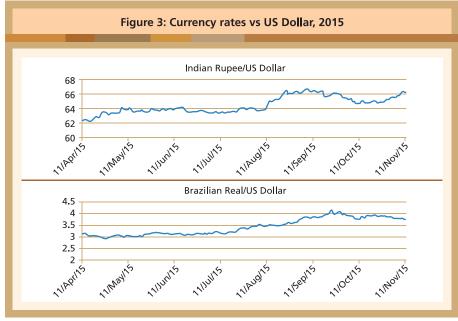
On numerous occasions, WPI has reported on more than comfortable balance sheets for corn, soybean and wheat. Unless serious weather problems



Sources: CME, WPI



Sources: CME, WPI



Sources: CSI, WPI analysis

arise in key production areas in the Southern Hemisphere and next spring in the Northern Hemisphere, this situation will likely continue well into 2016.

With urea and corn prices correlating quite strongly (Figure 2), the global grain outlook offers few, if any, reasons to believe fertiliser prices will stage a graindriven rally.

Emerging currencies

The US Dollar is holding close to multiyear highs after investors increased bets on a US rate rise in December 2015. If that actually occurs, renewed strengthening of the US Dollar against most currencies seems intuitive, including the Indian Rupee and the Brazilian Real.

Indirectly, a stronger US Dollar is generally considered a bearish macro factor, and that also applies to fertiliser markets. Nevertheless, the results may be mixed.

In Brazil, a weak Real has helped boost farm profitability and consequently aided corn and soybean plantings that otherwise would have suffered from low international prices. Higher acreage helped fertiliser demand, but a weak Real has also made imports more expensive. This scenario certainly applies to the import of phosphates into India, which have been made very expensive by a weakened Rupee.

The weakening of the Brazilian Real and the Indian Rupee has tapered off in recent months or even reversed (Figure 3), but may resume well into 2016 with a Fed rate rise in focus, and that will have an overall bearish impact on fertilisers.

> Joost Hazelhoff AG Review December 2015, World Perspectives Inc

This is an edited version of the article.

Bad Case of Déjà Vu

France proposes a palm oil tax

On Jan 21, 2016, the French Senate passed an amendment approving a massive and discriminatory new tax on palm oil, as part of the French Government's Biodiversity Bill.

For many who have followed the palm oil debate in France, this is sadly familiar. The same Green Senators, using the same prejudiced criteria, had proposed the same palm oil tax in 2013, 2014 and 2015. It was defeated on every occasion.

So, why was the tax defeated then, but has now been passed? This is a critical question in order to understand the situation.

The primary reason that the tax was defeated previously was that it has no economic rationale at all. Palm oil is not under-taxed in France – such claims by isolated Green Senators are simply untrue.

Imposing only taxes on palm oil, and not on similar vegetable oils, would be unjust. Many French Parliamentarians and government leaders recognised this, and so voted against the tax each time.

The current Foreign Minister, Jean-Marc Ayrault, was even moved to give a speech in 2013 promising that France "would never impose discriminatory taxes on palm oil".

So what has changed? Two primary factors.

 The intervention of Environment Minister Ségolène Royal – she had previously made negative comments about palm oil, for which she apologised. However, she has played a substantial role in allowing the new tax to pass.

She gave a 'neutral' recommendation to the Senate, substantially influencing the governing Socialist Party. As a result, many Socialist Senators who in previous years had opposed the tax, now support it.

2. The Senate this time proposed the tax as part of the Biodiversity Bill – a politically less significant piece of legislation.

This allowed Minister Royal and the Green Senators to sneak through the palm oil tax, with less scrutiny or attention.

Previously, the tax had been proposed in the high-profile PLFFS Financing Bill, meaning that bogus arguments were exposed in public and so the vote would always go against the tax.

As a result, the damaging tax has now been passed, and awaits a vote in the National Assembly in March.

Unsound basis

We know that the tax is economically unsound. It is also legally unsound. The tax would contravene both WTO trade rules, and the Internal Market laws of the European Union, because it is discriminatory (only applying to palm oil and not to competing products). To make matters worse, the 'justifications' for the tax are scientifically unsound:

- Claims that palm oil is harmful for health have been thoroughly debunked by numerous international scientific bodies.
- Allegations that Malaysia is deforesting have been exposed by a recent United Nations forest report as being simply, and demonstrably, inaccurate.

To recap, the palm oil tax is discriminatory, which breaks EU and WTO rules. The scientific rationale has been undermined by experts in every field; and the economic basis for the tax is fraudulent.

The decision now moves on to the National Assembly, and the French government will have a critical role to play.

Malaysia, and other palm oil - producing countries, are historically good friends and trading partners with France. Indeed, Foreign Minister Ayrault has said as much – in the same speech in 2013 when he promised not to tax palm oil.

It should be the fervent hope of the one million Malaysians who depend on the palm oil sector – including 300,000 small farmers – that he can keep his promise, and that the government will see sense and reject this tax.

Markets

Time to End Injustice

Why penalise palm oil?

AN old Latin saying goes, 'It is better to suffer an injustice than to do an injustice.' In this connection, I could not help but shake my head when reading about the proposed tax on palm oil imports into France, put forth by three senators from the French Green Party under the guise of protecting biodiversity.

Indeed, if voted through, this tax would immediately undermine the viability for food companies to use palm oil, thereby effectively strangulating the demand for palm oil.

The proposal has therefore nothing to do with free trade, nothing to do with a level playing field but everything to do with injustice and discrimination that normally are virtues not in line with what the European Union (EU) preaches. This is worrisome.

The palm oil industry is by no means perfect but it is also time to recognise that an increasing number of growers in Southeast Asia, be it Malaysia, Indonesia or Thailand, have moved on.

Over the last 10 years, they have voluntarily committed

themselves to sustainability criteria through, for example, the Roundtable on Sustainable Palm Oil (RSPO), providing the market with certified sustainable palm oil.

I can confidently state that these standards are more stringent and thorough compared to the criteria bestowed upon the majority of farmers in the EU, Russia or the US today. So why penalise those who are making a concerted effort in terms of embracing the 'gold standard' of sustainable agriculture?

Indeed, it is difficult to believe that oil palm, which occupies only 0.4% of world agricultural land – yet produces one-third of the world's edible oils and fats and accounts for 62% of the world's entire exports of oils and fats – must be exposed to such discrimination and prejudice in France whose ethos is 'fraternity, equality and liberty'.

The proposal by the French Green Party to support discrimination instead of a level playing field therefore belongs to an era of the past.

It is now time for the French parliamentarians to show statesmanship and to ensure that the livelihood of six million oil palm smallholders and their families will not be determined by the Environmental Minister Ségolène Royal, who has taken delight in having a personal vendetta against the palm oil industry. It is now time to put an end to this injustice so justice can prevail.

> Carl Bek-Nielsen Chief Executive Director, United Plantations Bhd, & Co-Chair, RSPO

This is an edited version of a letter published in The Star on Feb 17, 2016.

Palm oil producers against France's new tax proposal

Malaysia and Indonesia have voiced protest against France's plan to impose a progressive tax on palm oil with effect from next year.

On Jan 21, the French Senate approved an amendment to raise the import tax on palm oil from ≤ 100 per tonne to ≤ 300 from 2017; to ≤ 500 per tonne from 2018; to ≤ 700 per tonne from 2019; and ≤ 900 per tonne in 2020.

Malaysian Plantation Industries and Commodities Minister Datuk Amar Douglas Uggah Embas said the tax is unreasonable and is clearly intended to kill the palm oil industry.

He said this at a joint press conference with Rizal Ramli, Indonesia's Coordinating Minister of Maritime and Resources, after a meeting of the Council of Palm Oil Producing Countries in Jakarta on Feb 4.

Uggah said Malaysia and Indonesia understand that the action is possibly to safeguard the French vegetable oil industry that is competing with palm oil, but noted that the tax would violate World Trade Organisation rules.

He said the move would affect millions of Indonesians and Malaysians working or involved in the industry.

Rizal said the implementation of an additional tax makes no sense and that France has no strong reason to do so. He also said this could hurt bilateral relations.

"The tax increase is malicious and intends to kill the palm oil industry in both countries as the selling price of palm oil is only €550 per tonne [....]," he said.

"Although France is a small market for Malaysia and Indonesia, the country's move to increase the palm oil import tax could influence other countries to follow."

Source: Bernama, Feb 4, 2016 (edited version)

Malaysia committed to BI0 biodiesel ____

Malaysia remains committed to its plan to raise its biodiesel mandate to 10% despite low oil prices, said Plantation Industries and Commodities Minister Datuk Amar Douglas Uggah Embas.

He said the government is in the final stages of consultation with stakeholders on the B10 programme, which mandates a minimum 10% of bio content in diesel, and will submit a cabinet paper on this by the end of February.



"Yes, impacted, but price is not our only consideration," the minister said when asked if low oil prices would result in a change of plans. "There are various considerations and the sum of that will guide the government's biodiesel utilisation."

Oil prices slumped to their lowest since 2003 in the week of Jan 20 as the market anticipated a rise in Iranian exports after the lifting of sanctions against Teheran.

Source: Reuters, Jan 20, 2016

Indonesia bans permits for peatland cultivation

New permits for cultivation on peatland areas should no longer be issued in Indonesia, in order to prevent fires that are difficult to extinguish.

President Joko Widodo said this at a National Coordination Meeting on Forest and Land Fire Prevention on Jan 18.

He also ordered the environment and forestry minister to take over the management of burnt peatlands; and instructed the newly established Peatland Restoration Agency (BRG) to work out an immediate draft action plan on caring for burnt peatland areas.



"I have explained to heads of state that what was burned was not forest areas, but peatland; [these] fires, if not immediately put out, could reach down to three to four metres below the surface and [are] very difficult to extinguish," he said, referencing the seriousness of the problem.

The president stressed that efforts to prevent and put out land and forest fires should be improved this year. Fires should not be allowed to grow before efforts are made to extinguish them.

"There is no choice other than improving the handling of the ecosystem," he said.

He had earlier said that Indonesia is serious about handling the damage to peatland, as evidenced by the establishment of the BGR on Jan 13 under presidential regulation Number 1 of 2016.

"We can convince the international community that we are serious, very serious, about handling the damage to the peatland," the president said.

"Although these (land and forest fires) have happened repeatedly over the past 18 years, they serve as a valuable lesson."

Source: ANTARA, Jan 18, 2016 (edited version)

Malaysia-EU trade agreement expected soon

After a five-year process, negotiations for a Malaysia-European Union (EU) Free Trade Agreement (FTA) are expected to be concluded within the first quarter of the year. The agreement is Malaysia's latest bilateral initiative with the EU.

Malaysia's International Trade and Industry Minister II Datuk Seri Ong Ka Chuan said the FTA would boost the economy, as exports to countries like Germany and Italy would be free of taxes.

"We will actively pursue this negotiation and close it as soon as possible, especially since Vietnam has just closed a deal with the EU.We must not lose the [competitive] edge as Malaysia will benefit greatly from this bilateral trade," he said.

Along with tax-free exports to, and the import of goods from, the EU - a 500 million-strong market of 28 countries - Ong said he expects increased foreign investment when the agreement is signed. More than 80 types of goods are currently being taxed.

He further noted the need to "activate the e-commerce industry beyond our borders, so traders and customers can deal with their goods freely once the FTA is signed, instead of having to go through the Customs Department and its taxation [procedures]".

The lack of international e-commerce trade has meant that the Gross Domestic Product value of Malaysia is only 5.8% compared to the US (30%), China (20%), Singapore (15-20%) and Taiwan (14%), he said.



Malaysia and EU had commenced discussions on the FTA in 2010. These were put on hold last year as both sides were still studying the guidelines and limitations surrounding the agreement.

Source: Star Online, Feb 1, 2016

India cuts palm oil imports

Palm oil purchases by India fell in December 2015, the first decline during the year, as record stockpiles in the world's largest buyer prompted traders and refiners to slow shipments.

Imports dropped 7.9% to 770,000 tonnes from a year earlier, according to the median of estimates from five processors and brokers compiled by *Bloomberg*. Total vegetable oil purchases, including soybean oil climbed 21% to 1.38 million tonnes, the survey shows.

Stockpiles in India had surged to an all-time high in December after traders boosted imports on concern that the first back-to-back shortfall in monsoon rain in three decades will shrink the oilseed harvest and worsen a cooking oil deficit.

The country, which depends on overseas supplies to meet 70% of its needs, will still import 1.3-1.5 million tonnes of vegetable oil each month in 2016, according to Sunvin Group, a Mumbai-based broker and consultant for the oil and oilseed industry.

"Higher stocks at ports and in the pipeline by the end of November [2015] kept palm oil imports lower," said Nagaraj Meda, managing director of Hyderabad-based TransGraph Consulting.

Vegetable oil stockpiles jumped to a record 2.43 million tonnes on Dec 1, compared with a monthly requirement of 1.6 million tonnes, according to the Solvent Extractors' Association. The government should increase the tax on imports of refined cooking oils to 27.5% from 20% now to curb cheap supplies and protect domestic oilseed crushers, the association said on Dec 21, 2015.

India buys palm oil from Indonesia and Malaysia and soybean oil from the US, Brazil and Argentina. Vegetable oil imports may climb to a record for a second year, increasing to 15.2 million tonnes in the 12 months that began Nov 1, 2015, from 14.6 million tonnes, Sandeep Bajoria, chief executive officer of Sunvin Group, said in December.

"Higher imports will continue because of low production and as farmers are also not selling their crop," said Ashok Sethia, a director at Sethia Oils Ltd.

India's monsoon-sown oilseed harvest is seen declining 11% to 12.6 million tonnes in 2016 from a year earlier; the Central Organisation for Oil Industry and Trade said last October. Soybean oil imports probably climbed more than five-fold to 490,000 tonnes in December from a year earlier; sunflower oil purchases dropped 34% to 100,000 tonnes; and canola oil purchases were 25,000 tonnes, the survey showed.

The Informed Consumer

Do we root for Malaysian palm oil? Of course we do! We are the Malaysian Palm Oil Council (MPOC). We love palm oil. This is our greatest strength. At the same time, it is our weakness.

As an organisation, our mission is to promote the Malaysian palm oil industry. And we are passionate about it. We know what brings pain to our farmers. We are familiar with the technical problems of milling crude palm oil. We deal on a daily basis with the complexities of the value chain until our product finds its way to you.

This focus on providing a top quality product to customers and information to stakeholders can sometimes make us forget about you, the consumer. We might miss the fact that you have questions about the global palm oil industry, and that these questions frequently go unanswered.

The benefits of palm oil are so selfevident to us that we assume everyone else can see them, too. We often do not take time to explain what is fact and what is fiction in the public debate about palm oil. We forget that you do not know what we know. But we want to change that.

We recognise that the lack of objective information has allowed many myths to develop and take hold. Beliefs that are patently wrong have become the accepted norm in the public discussion.

Palm oil is the most consumed vegetable oil on the planet by far. But the very success of our product has led to negative claims in some quarters about its nutritional properties and the environmental aspects of cultivating oil palm.

Let's be clear about one thing. The MPOC accepts that the Malaysian palm oil industry must uphold its social responsibility. We are in favour of protecting our natural patrimony to the full extent possible. And we welcome public scrutiny of what we do.

Palm oil and nutrition

In our opinion, the pendulum often swings to an extreme where allegations against palm oil have nothing to do with reality. You, the consumer, may hear that palm oil is not good for your health. This information comes from different sources, some with an economic agenda of their own.

However, this does not square with the latest scientific evidence. The alleged negative health effects of palm oil usually are said to have to do with its relatively high content of saturated fats.

Forget for a moment that palm oil contains a smaller amount of saturated fats than dairy butter. Nutrition experts have, for a number of years now, pointed out that fat belongs in a healthy diet – and the notion that fat *per* se is bad for you is an outdated belief.

In 2014, a book by Nina Teicholz conquered the bestseller lists of the New York Times and the Washington Post. The British weekly The Economist named it 'Book of the Year'. Its title: The Big Fat Surprise: Why Butter, Meat and Cheese Belong in a Healthy Diet.

In summary, the book shows that foods rich in saturated fats do not cause heart disease. In fact, as part of a healthy diet, they actually are good for you.

Comment

In a review, the American Journal of Clinical Nutrition stated: 'This book should be read by every nutritional science professional as a guide to risks of hubris. Teicholz compiled a historical treatise on how scientific belief (vs evidence), nonorganisations, food government manufacturers, government agencies and moneyed interests promised more than they could deliver and, in the process, quite possibly contributed to the current worldwide obesity epidemic.'

All this should amount to nothing less than a re-evaluation of the nutritional guidelines to which we have become accustomed. It is something many interested parties will not tell you. But we think you should know about it.

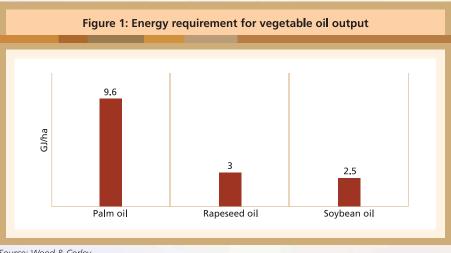
Palm oil and the environment

In Western Europe, most schoolchildren are led to repeat the mantra that 'palm oil kills the orang utan in the few rainforests that are left in Southeast Asia'.

We have no intention of denying that cultivating the oil palm - like any economic activity - does have some consequences for the environment. But truth should not be driven from the debate like a wild animal from its habitat.

Let's first look at the issue of deforestation. In spite of what you may have heard, Malaysia retains an amazing 67.6% of its land under tree cover, according to 2015 data from the UN Food and Agriculture Organisation. Malaysia is ranked 19th in the world. In short, there are only 18 countries that have more trees on their territory.

The global demand for palm oil is strong and rising. It is not only used for luxury articles like cosmetics and candy.



Source: Wood & Corley

The largest importers are China and India, which use it mainly to feed their people.

It is here that the competitive advantage of the oil palm comes into its own. It is the most efficient oil crop by far. Its productivity - measured in yield (tonnes per hectare of land) - is up to 10 times higher than that of competitors.

In addition, palm oil production requires lower use of agrochemicals (fertilisers and pesticides) and fossil fuels (for power generation, milling or transport) than other oil crops. This results in the best energy balance of all major oil crops.

The assessment is made with an inputoutput analysis that compares the amount of energy necessary for the production of one tonne of vegetable oil. The input-output ratio is expressed in gigajoules per hectare (GJ/ha). The exact ratio will of course vary according to the production conditions and intended use of the end product, say cooking oil versus biofuels.

Studies indicate that the energy efficiency of palm oil is more than three times that of the second-best in class, rapeseed oil. And almost four times more efficient than soybean oil. (Figure 1).

According to Oil World, an independent analyst of the oilseed industry, the global land area under oil palm cultivation is roughly 14 million ha. If that sounds like a lot, consider this: France s territory is 64 million ha. So, all the oil palm trees grown worldwide add up to no more than one-fifth of the area of Europe s largest country. And Malaysia s share of this is only around 4.8 million ha.

Little wonder, then, that Malaysia has successfully maintained at least 50% of its land under forest cover, much of it in protected areas. No Western European country comes even close in this respect.

Misperceptions are bad for everybody: for the consumer, for farmers and for the environment. You - the end-user of our product - have a right to objective and truthful information.

MPOC

WTO Environmental Goods Agreement

Understanding the process

From Oct 29 to Nov 4, 2015, delegates from 17 WTO member-states met in Geneva, Switzerland, for the tenth round of negotiations on the Environmental Goods Agreement (EGA). Although Malaysia is not a party to the negotiations, it is worthwhile to take a look at the process and consider the potential implications of the EGA on world trade.

The EGA is a plurilateral agreement that aims at removing barriers to trade in environmental or 'green' goods, in a broader effort to protect the environment and mitigate climate change.

In the long term, the EGA is envisaged as a 'living agreement' that will expand to add new products in response to changes in technology and eventually address environmental services and non-tariff barriers to trade. However, it currently relates only to environmental goods.



The EGA was launched in July 2014 by 14 WTO member-states – Australia, Canada, China, Costa Rica, the EU, Hong Kong, Japan, Korea, New Zealand, Norway, Singapore, Switzerland, Chinese Taipei and the US. The negotiating parties set out to build on a list of 54 environmental goods on which members of the Asia-Pacific Economic Cooperation (APEC) had committed to reduce import tariffs in 2012.

Over the course of numerous negotiating rounds, the parties established and reviewed the environmental goods categories (energy and resource efficiency, air pollution control, renewable energy equipment, solid and hazardous waste management, etc) and nominated relevant products for inclusion. Three more member-states (Israel, Iceland and Turkey) joined the negotiations during this period.

In more recent rounds, the negotiating parties focused on product-by-product discussion to refine and secure a list outlined in August 2015. Reportedly, in bilateral and plenary sessions, delegates analysed over 1,000 products and examined over 450 possible tariff lines for inclusion.

The discussions from Oct 29 to Nov 4, 2015 resulted in a 'draft final list' of potential products whose tariffs will be lowered under the EGA. The Chair is said to have circulated the list in advance of the eleventh round of negotiations, from Nov 30 to Dec 4, 2015, for review by all 17 parties.

Areas of debate

The latest round continued negotiations on sensitive products proposed for inclusion in the list, as well as issues relating to approximately 100 'ex-outs' nominated for inclusion in the EGA.



Ex-outs' are national tariff codes built off more general descriptions of goods provided by the World Customs Organisation's Harmonised System (HS) tariff lines. They describe specific products or product groups that are particular to individual countries with a level of detail not captured by HS codes.

The debate over competing 'ex-outs' suggests that negotiating parties are approaching the task of finalising the environmental goods list with care, in order to ensure that these are indeed beneficial to the environment.

The compiled list of EGA product nominations has not been officially released. But in September 2015, an environmental organisation 'leaked' a product nomination list from the EGA negotiations in April and questioned the 'greenness' of approximately 100 goods on the list.

Some sources say that these controversial nominations have since been dropped from the 'final draft list'. Indeed, many of the products included in the April list were criticised due to the potential for certain manufacturing products (general electronic hardware) to be used in non-environmentally friendly ways. The response has been to use 'ex-outs' that single out specific products within tariff lines so that non-environmentally friendly products are unable to benefit from the tariff cuts.

Another issue reportedly deals with the relationship between the current EGA list and the APEC Environmental Goods List on which it is based. Although the EGA list appears to be significantly longer than the 54 products in the APEC list, some negotiating parties have pointed to the fact that the inclusion of a products on the APEC list obliges parties to lower such tariffs to 5%.

In this regard, some negotiating parties are concerned with the full elimination of duties on the tariff lines identified in the APEC Environmental Goods List, arguing that lowering tariffs to zero was not the original objective of the EGA.

Nevertheless, this raises the question of whether additional or alternative approaches would be more effective in securing the EGA's over-arching goal of combating climate change. Though the nomination process and relevant criteria (if any) for product eligibility have remained opaque throughout the EGA talks, reports indicate that 'environmental credibility' has been the key consideration in agreeing on which goods to include.

In addition to the use of 'ex-outs', negotiating parties could have considered relying on already-established certification schemes and oversight bodies, such as those used in the oilseeds sector.

Such an approach could ensure that goods included in the provisional list that were criticised, such as biodiesel, are included if sourced sustainably. As a result, 'green' commodities such as sustainable palm oil, soybean and sugar could rightfully be covered by the agreement.

Although it is unclear whether such goods will be included in the final version of the EGA, given that the negotiating parties intend for the EGA to be a 'living agreement', there may still be opportunities in the future for WTO member-states (like Argentina, Brazil, Indonesia and Malaysia) with a genuine interest in the relevant commodities to influence the list of goods covered.

Moving forward

Some WTO member-states appear to have opted not to participate in the EGA negotiations due to fears that they would unnecessarily open their markets to competing manufactures of relevant products. In the short term, this may benefit such countries because initially, the EGA will apply in accordance to the 'most favoured nation' principle once a 'critical mass' of WTO member-states have agreed to participate.

In the context of the WTO Information Technology Agreement, the 'critical mass' is considered to have been met when participants of a plurilateral agreement account for approximately 90% of trade in the relevant products. At this point, the tariff reductions in the participating member-states go into effect for all member-states. Accordingly, non-signatory member-states will benefit from the tariff reductions once the EGA hits the 'critical mass'.

However, in the long term, it is likely that, through other bilateral discussions or consultations, other WTO member-states will be encouraged or pressured into joining the EGA in return for other trade concessions.

If that is the eventual outcome for a non-signatory WTO member-state, such a country would then have missed the opportunity to participate in the negotiation of the EGA, and to ensure that products relevant to its export industry are included.

In Malaysia's case, a critically-important green export product is sustainable palm oil. It is unclear whether palm oil is currently included in the list of EGA products, given certain concerns about the potential for unsustainable palm oil to also benefit from the agreement. Although one solution would be to tie certain products to sustainability certification requirements, there is no indication that this has been proposed yet within the EGA context.

Tying the use of a particular certification scheme, such as the Malaysian Sustainable Palm Oil standard, would have increased the recognition and strength of such a standard, and allowed sustainable palm oil to benefit from reduced tariff rates and from the priceless label of 'green product'.

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Joining Hands to Safeguard Palm Oil

Opportunities for major producers

Two heads are better than one. As leading producers of palm oil, Indonesia and Malaysia are rightly coordinating efforts to combat unjustified negative perceptions about the industry. All this while, the two governments and industry associations have acted independently to limit restrictions on palm oil. They have also worked to sway public perception with reasoned debate.

On Nov 21, 2015, Malaysian Prime Minister Dato' Sri Najib Abdul Razak and Indonesian President Joko Widodo agreed to establish the Council of Palm Oil Producing Countries (CPOPC). By joining forces, both countries have an opportunity to exert their dominance on the market, and to influence the harmonisation of sustainability standards as well as the competitiveness of palm oil.

The palm oil industry has withstood unwarranted initiatives over the last few years. These actions have included legislative proposals tabled in major markets, as well as anti-palm oil campaigns championed by biased NGOs and economic operators.

In the EU, the most direct anti-palm oil legislative proposals have occurred in France. Most notably, in November 2012, the Social Affairs Committee of the French Senate introduced an amendment to the French social security budget law for 2013 that would have imposed an additional excise tax of EUR 300 per tonne of palm oil, copra and palm kernel oil for use in human food. This tax would have also applied to imported food containing these products.

The attempted justification was that such products are harmful to health in that they allegedly contribute to obesity and cardiovascular disease. Fortunately, the French Senate rejected the proposal by 186 votes to 155 votes. More recently, the French Parliament debated the adoption of a 'simplified' nutrition labelling scheme that would take into account the caloric, fat, saturated fats, sugar and salt content of food, and combine the results on a five-point scale with dots coloured green, yellow, orange, pink or red. The scheme is included in a draft French Public Health Act, which is still under debate.

In addition, the French industry has been actively pursuing initiatives that would discriminate against the palm oil industry's access to the EU market. With regard to the 'simplified' nutrition labelling scheme, members of the French Trade and Retailing Federation such as Auchan, Carrefour, Casino, Monoprix and Système U presented their own proposal to various ministries and consumer associations at a meeting organised by the Ministry of Health on Oct 27, 2015.

The proposal is called *Aquellefréquence* ('how frequently', in English), and specifies an algorithm for classifying food products by four colours (green, blue, amber and purple), depending on how often they should be consumed.

The UK had introduced a comparable colour-coded nutritional labelling system in 2013, referred to as 'traffic-light' labelling scheme. However, in October 2014, the European Commission formally opened proceedings against the UK due to concerns that the scheme is more trade restrictive than necessary.

Several manufacturers and retailers in the EU, particularly in France and Belgium, have also adopted the practice of including 'no palm oil' or 'palm oil-free' labels on certain products. These campaigns have been waged both for alleged nutritional and environmental reasons. However, the adoption of colour-coded nutrition labelling schemes and the use of 'free from' labels are arguably a violation of the EU's Food Information to Consumers Regulation (FIR).

The FIR has mandatory nutrition labelling requirements, including the obligation for food products to include information on the caloric, fat, saturated fats, sugar and salt



content of food. In addition, the specific origin of vegetable oils must be indicated in the list of ingredients of pre-packaged foods. As such, negative labelling indicating information that is already mandatorily provided on the product (in the positive), is clearly duplicative, redundant and misleading.

Palm-based biofuels

In the biofuels sector, meanwhile, palm oil faces discrimination in the EU and the US.

In the EU, the Fuel Quality Directive and the Renewable Energy Directive provide for so-called 'sustainability criteria' that require biofuels to result in 35% greenhouse gas (GHG) emissions savings. These also state that the land used to produce biofuels must possess certain characteristics, in particular, that it does not have high biodiversity value and/or high carbon stock.

Biofuels that do not conform to these requirements may still be marketed in the EU, but are not eligible for demonstrating compliance with the relevant emissions reduction targets, or for financial support.

In the US, the Renewable Fuel Standard requires 'renewable' fuel to be blended into transportation fuels (for motor vehicles as well as non-road, locomotive and marine engines) in increasing amounts each year. Criteria for the 'renewability' of biofuels include the requirements that they produce at least 20% less

lifecycle GHG emissions than their fossil fuel counterparts.

In the EU and the US, the relevant authorities have determined that palmbased biofuel does not meet the criteria for 'sustainability' and 'renewability'. Additional review and consultation by the Indonesian and Malaysian governments have been unable to result in improved conditions for access to both markets.

Confusion over sustainability standards

Outside of regulatory initiatives designed to cause, or resulting in, harm to the palm oil industry, significant efforts have been made by NGOs to affect public opinion

Comment

regarding palm oil. Largely ignoring economic realities and practical difficulties, NGOs have launched generalised campaigns condemning palm oil producers for alleged inappropriate industry practices.

To combat such accusations, many private businesses have signed 'no deforestation' agreements, as well as supported the development of voluntary or mandatory national and international sustainability standards and certification schemes for palm oil.

These schemes have become increasingly popular as a means of encouraging (or enforcing) the sustainable production of palm oil, but have also created confusion and higher costs in the process of compliance.

One of the schemes most commonly referred to is the voluntary certification scheme by the Roundtable on Sustainable Palm Oil. In spite of its widespread use, the scheme appears particularly burdensome for producers, *inter alia* because the 'Principles' and 'Criteria' on which it is based are complex and change often.

Indonesia and Malaysia have since come up with national standards and certification schemes: the Indonesian Sustainable Palm Oil (ISPO) and the Malaysian Sustainable Palm Oil (MSPO) standards.

- The ISPO is a mandatory standard designed to ensure that all Indonesian palm oil producers (and not just those exporting to foreign markets) conform to sustainable production practices.
- The MSPO, initially launched as a voluntary scheme, is intended to become mandatory in the future.

The implementation of such standards has resulted in a noticeable improvement of the public perception of the industry, but has also brought about a situation of fragmented rules and uncertainty among producers.

What the CPOPC could achieve

Although many Malaysian and Indonesian palm oil companies compete against one another in the international market, the common objective of ensuring that there is fair opportunity for palm oil, regardless of its origin, remains a high priority for them. Where previously the Indonesian and Malaysian governments, as well as their respective industry associations, would separately invest their resources to pursue such objective, the establishment of the CPOPC provides significant increases to efficiency and leverage.

The CPOPC allows the two governments to pool resources and more effectively circulate accurate information to the public regarding the palm oil industry as a response to negative campaigns maintained by NGOs. Indeed, compared to other vegetable oil sources (maize, soybean, sunflower seed and rapeseed), the oil palm produces higher yields using less land and requiring fewer chemicals such as fertilisers and pesticides.

In addition, regulators, producers and traders have developed standards and adopted measures to help shift palm oil production to lands that are already degraded and turn a rapidly growing industry into a sustainable development model. A joint effort by Indonesia and Malaysia will surely result in a high 'return on investment' on external communication expenses, legal analysis and socio-economic engagement.

Indonesia and Malaysia are the two biggest palm oil-producing countries, together accounting for 85% of global output. As major representatives, they have an opportunity and, indeed, a duty to combine forces and jointly lobby against misleading legislative proposals or private initiatives, such as 'traffic-light' and 'free-from' labelling.

The CPOPC could also make efforts to secure 'sustainable' and 'renewable' status for Indonesian and Malaysian palm-based biofuel in the EU and the US. Given their leverage, it should be for Indonesia and Malaysia to define the applicable sustainability standards for palm oil. They have at heart the destiny of this industry, the sustainability of their economic, industrial and employment practices, and the well-being of their forests and environmental assets.

At the very least, Indonesia and Malaysia could together propose an ASEAN Palm Oil Sustainability Standard, and work to grow such a regional standard into the internationally accepted sustainability standard for palm oil.

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Malaysian Palm Oil: A Reality Check

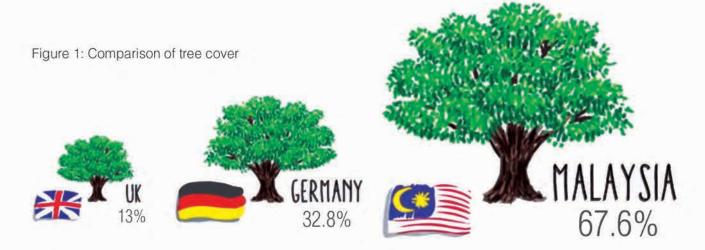
Sensible approach to climate change

nyone who follows the news would have heard of the alleged connection being made between the production of palm oil and global warming. Slash and burn agriculture, the destruction of peatlands and vast monoculture plantations are said to emit unprecedented amounts of greenhouse gases (GHG) into the atmosphere, effectively killing the planet.

Without denying that problems exist, it is time for a more balanced look at these issues. In particular, the reality on the ground in Malaysia, a palm oil-producing country, is often quite different. The traditional argument from environmental groups basically runs like this: large areas of the rainforest are destroyed and turned into oil palm plantations. Massive amounts of carbon stocked in the forests are released, contributing to global warming.

On the issue of deforestation, it may come as a surprise to many that Malaysia, after decades of brisk economic growth, still ranks in the top 20 of countries in terms of tree cover.

Excluding land under production, a whopping 67.6% of the land is covered with trees, according to the UN Food and Agriculture



Source: FAO 2015

Environment

Organisation. As Figure 1 shows, this compares very favourably with Western European countries.

Also noteworthy is the fact that Malaysia has dedicated more than 15% of its territory to protected forest, which exceeds 5 million ha. The World Bank further notes that Malaysia s forest cover has increased over the past few years, albeit not by much.

In truth, this should not even be such a big surprise. After all, Malaysia had committed almost 25 years ago at the 1992 Rio Earth Summit to maintaining a minimum forest cover of 50%. That goal was reiterated at the United Nations Framework Convention on Climate Change (UNFCC) in Copenhagen in 2009. So, Malaysia has 'over-delivered' on that promise.

Does this mean that there is no issue with GHG emissions in palm oil production? No, such a claim would of course be a little outlandish. Just like every other economic activity, the production of palm oil too produces emissions. This is a subject that has to be dealt with responsibly.

Controlling POME

The problem arises not primarily with deforestation or land conversion, as most believe. According to a study by the Roundtable on Sustainable Palm Oil (RSPO), the biggest issue is with palm oil mill effluent (POME).

In the production of crude palm oil, fresh fruit bunches are ground to extract the oil. POME is a by-product of the milling process and contains a high concentration of biodegradable organic material. This makes it necessary to treat POME before it can be discharged. Usually, the POME is collected in ponds or lagoons and the naturally available oxygen takes care of the disintegration of the organic material. One outcome is that the decomposition releases biogas, mainly methane – considered a potent GHG. From the POME ponds, it finds its way into the atmosphere.

But here is the good news: the technology to control this exists and is already at work in Malaysia. The key is to capture the biogas during the production process.

The Malaysian government has recognised this solution as an opportunity. In its national Economic Transformation Plan, 12 National Key Economic Areas have been established, with palm oil being one of these. For this sector, eight key measures or Entry Point Projects (EPP) are defined.

EPP No. 5 is: 'Build biogas facilities at mills across Malaysia'. According to the official document, the declared goal of the programme is to:

- Encourage palm oil mills in Malaysia to implement biogas trapping and utilisation; and
- Inform palm oil millers about the benefits of biogas trapping and provide the relevant information to facilitate planning and implementation.

If the biogas is captured in the process of producing CPO, a winwin situation emerges, mainly for two reasons.



Firstly, the benefits to the producers themselves are twofold. They can save costs by using the biogas as fuel in the mills, replacing diesel. And plantations may earn emissions savings certificates under the Clean Development Mechanism of the Kyoto Protocol (the part of the UNFCC that commits the participating countries to GHG emissions savings targets). Those certificates are potential money earners because they are internationally tradeable.

Secondly, the climate stands to benefit. Not only is the methane not released into the atmosphere, but the replacement of diesel also means the production of less GHG. The overall effect on the climate can be so significant that the RSPO even concludes: 'If new production areas are developed in areas which are not high in carbon stocks, palm oil production may lead to net carbon sequestration.'

Many will find this conclusion to be counter-intuitive. Consumers are so used to thinking about the environmental damage allegedly caused by palm oil that they forget one simple, but vital fact: the oil palm tree is a plant. And as everybody knows, trees store carbon dioxide. Palm oil is not an artificial product but made by Nature.

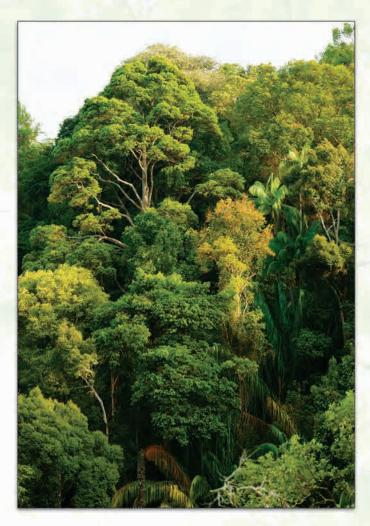
Add to that the potential of palm-based biofuels to replace the limited resources of fossil fuels like petroleum, and the environmental picture painted by palm oil looks decidedly sunnier.

Climate footprint

It is important to recognise that blanket statements like 'palm oil destroys the climate' are fallacious. These lump diverse aspects of a complex topic together, blinding the observer from seeing relationships that matter.

Just like every other economic activity, the production of palm oil releases GHG. But it is crucial to take a closer look at the source. Diesel engines powering trucks and mills are one source. But they are not very significant. And the much bigger problem of POME can be controlled.

If done right, palm oil production may save the environment. When it comes to the effects on climate change, the comparison should not be 'palm oil production versus no palm oil production'. It should be 'palm oil production versus other vegetable oil production'. The reason is that – of all the vegetable



oils that can be produced in sufficient quantity – palm oil is by far the most productive crop in terms of yield per hectare of land.

Some studies show that, in terms of impact on the climate, palm oil is equal to the other big oil crop – soybean. But given its much better productivity, palm oil easily outperforms soybean overall.

At the end of the day the reality is this: a large and growing global demand exists for vegetable oil. On purely technical grounds, it is unlikely that any crop other than oil palm can satisfy this need. So what is needed is a responsible, environmentally sustainable supply chain.

Malaysia has come a long way in making its palm oil greener. So the conclusion is inescapable: when it comes to being sensible about climate change, Malaysian palm oil is second to none.

MPOC



In Sabah

Malaysia's single largest conservation area – nearly 24 times the size of Penang Island – has been created in the state of Sabah.

State

e Forestry Department director Datuk Sam Mannan said the conservation area of nearly 700,000 ha encompasses the Danum Valley, Maliau Basin and Imbak Canyon.

He said this was made possible after the state government upgraded more than 112,000 ha of biodiversityrich lowland forests to Class I protection forest reserves on Nov 26, 2015. These previously had Class II (commercial) Forest Reserve status.

"From approximately 480,000 ha in 2014, this corridor of life is now 679,156.99 ha. Arguably, it is the biggest totally protected area in one conservation block in Malaysia," he said.

Mannan said this block will include 69,454 ha of the "ecologically valuable" Kuamut Forest Reserve, which is "also being assessed for a carbon offset project".

The remaining 47,017 ha of the Kuamut Forest Reserve – parts of which are undergoing reduced-impact log harvesting – will be added to the conservation block when the timber operations end on Dec 31, 2018.

Mannan said Sabah's totally protected area now covers 1.78 million ha or 24% of the state's land mass.

"This is in compliance with the government's policy to have 30% of Sabah under a totally protected area by 2025," he said.

He said Sabah's conservation area had increased significantly since 2003 when Datuk Seri Musa Aman took over as Chief Minister. The totally protected area then had accounted for 842,597 ha or 11.45% of the land mass.

The exemplary actions of the state government, driven by the chief minister, will give Sabah a unique advantage in world tropical forest management, he added.

Accolades for the initiative have been received from around the world, including from the UK Royal Society South East Asia Programme.

Sources: Star Online & Borneo Post, Dec 31, 2015

This is an edited version of the articles.

BIAS AGAINST PALM OIL

In research and news sources

A new piece of research published in the Proceedings of the National Academy of Sciences on mangrove forests has prompted a number of media outlets to make palm oil the story.

For instance, headlines have appeared on the BBC declaring a 'Rice and palm oil risk to mangroves'. The stories claim that rice and oil palm development are responsible for 38% of mangrove deforestation. But what are the facts?

A close look at the data presented by the researchers presents a picture that is completely different to the headlines. And there are a number of points raised by the researchers that contradict the headlines.

The first is that the total amount of mangrove deforestation across Southeast Asia is relatively small – approximately 2% over a 12-year period.

The second is that the major threat to mangrove forests is aquaculture, responsible for around 30% of mangrove deforestation across the region. This is followed by rice (21%), and then oil palm (17%). In other words, oil palm is a distant third.

The third point is that oil palm deforestation has been decreasing in Malaysia. It is now at lower levels than it was in 2007.

These key facts were ignored or downplayed in the BBC reporting.

There are three other points that are significant, that are not raised in the research.

The first is that mangrove areas are in themselves not well suited to oil palm planting. Inundation by brackish water requires the establishment of bunds by farmers. It is generally the case that those undertaking planting on mangrove forest are doing so illegally.

Second, approximately 85% of mangrove areas in Malaysia have been gazetted for conservation or protection.

Third, Malaysia is undertaking a number of programmes and projects to restore peatlands that were degraded in the past. The current projects involve a number of private-sector companies that are contributing both expertise and financial resources.

Despite this, the research and the media coverage have directed the focus to palm oil. More than that, this has generalised the information across regions. For example, while Malaysia's mangrove deforestation is declining, Indonesia's is increasing and is roughly double that of Malaysia.

Furthermore, the main drivers across the entire region are the establishment of aquaculture and rice production. Both are vital contributors to national economies and overall development.

All three leading drivers – aquaculture, rice and oil palm – are for food production. So, more than two-thirds of mangrove deforestation are for food production.

Causes of deforestation

One of the most significant studies of deforestation over recent years was by Geist and Lambin; it separated proximate and underlying causes of deforestation. For example, smallholder agriculture may be a proximate driver of deforestation, but the underlying driver might be poverty.

But underlying drivers aren't mentioned in either the media coverage or even the journal article itself.

A story stating that impoverished populations are cutting down trees to grow rice would have been more accurate, but it would have been less likely to gain attention, particularly on a news outlet such as the BBC.

Even worse, it appears that the media has chosen to include palm oil in its coverage simply because it is the *bête noire* of Western environmentalists. There are fewer sensationalist headlines in fish and rice than in palm oil.

MPOC

Southeast Asia Not Hotspot for CO₂ Release'

Finding from study of peatland rivers

Southeast Asia is not a hotspot for carbon dioxide release – its peatland rivers emit much less of the greenhouse gas than previously assumed, a study has found.

Although the region has a lot of carbonrich peat soil, researchers have found that the amount of carbon dioxide released by its rivers was six times less than that from a similar ecosystem in the Amazon.

The study, conducted by researchers from two German universities, an Indonesian research centre and Swinburne University of Technology Sarawak Campus, measured for the first time carbon dioxide emissions from four peatland rivers in Sumatra and two in Sarawak.

The findings were published in the *Nature Communications* journal in December 2015.

Co-author Dr Moritz Mueller of Swinburne Sarawak said Southeast Asia was thought to be one of three hotspots along with the Amazon and Africa – for carbon dioxide emission by rivers because of its large areas of peat soils, especially in Malaysia and Indonesia.

"But what we found, when we measured how much carbon dioxide was coming out from the rivers here, [is that] it's actually much less than we expected. Based on the soil and common theories we expected a lot more, but it was about six times less than expected," he said in an interview.

"In layman's terms, the Amazon gives out about 125 units of carbon dioxide but we give out about 25 units."

Mueller said this finding is significant because it has changed calculations about the global carbon cycle and how much Southeast Asia contributes to climate change.

"We were very much surprised by the results. There's a budget for the carbon cycle around the world – what gets released from what kind of ecosystem, from soil, rivers, the ocean, cities and what gets taken up by different areas.

"This study changes the one for rivers, especially from this region which was a question mark previously. Now we have the actual number and it's much lower than we thought."

The researchers' main explanation for the lower emission is that rivers in Southeast Asia are relatively short, so there is little time for organic matter to decompose before it flows into the ocean.

"When the organic matter gets into the river and is released into the ocean, microbes have very little time to convert it to carbon dioxide," said Mueller.

However, he said the researchers do not know yet what happens to the organic matter in the ocean, saying "that is for follow-up studies".

He also said other follow-up studies are being done to investigate the role of microbes as well as the human impact on the carbon emission process, as the first study measured emissions from rivers in the undisturbed peat soil of Sarawak's Maludam National Park.

"We will look at differences between the natural site in Maludam and sites in Sebuyau and Simunjan which are surrounded by oil palm plantations," he added.

"We now know that the natural state is not as bad as we thought, so we want to see what conversion to oil palm does to the process."

Source: Star Online, Jan 12, 2016

This is an edited version of the article.

Indonesia to Reduce CPO Exports

Domestic consumption to rise

ndonesia's B15 biodiesel programme stipulates to blend a mandatory 15% of fatty acid methyl ester (FAME, derived from palm oil) with 85% of diesel.

This was designed to relieve pressure on the trade balance and government budget deficit, as it should lead to a decline in crude oil and fuel imports. Moreover, Indonesia is the world's largest producer of crude palm oil (CPO).

The B15 programme was launched in April 2015, as the followup to the B10 programme. However, compliance has been low as biodiesel producers have had to wait for further regulations – such as the new biofuel index price and matters related to the new palm oil export levies used to finance the biodiesel programme. At the same time, state-owned energy company Pertamina ran out of FAME reserves.

As such, the BI5 programme is still to see its full implementation. However, the government has already announced it is keen on launching the B20 programme in 2016, raising the mandatory amount of FAME to 20% in the blend.

Higher domestic consumption of palm oil should manage to boost global palm oil prices. After having plummeted to historic lows in 2015, prices have recovered on speculation that palm oil output will be curtailed due to the *El Nino* strike, floods from year-end monsoon rains and increased demand in Indonesia.

Currently, Malaysian palm oil futures are touching an 18-month high (around US\$581 per tonne) and it is assumed that prices will rise gradually in 2016.

However, as global petroleum prices are expected to remain

under the US\$40 per barrel level in the foreseeable future, demand for palm oil will be curbed. Therefore, it is difficult for CPO to rise above US\$650 per tonne.

Sahat Sinaga, Vice-Chairman of the DMSI, said palm oil consumption in Indonesia is to rise to 11.5 million tonnes in 2016. It is expected to absorb 7.1 million tonnes of CPO for food processing (from 6.9 million tonnes in 2015), with the remainder for the biodiesel programme (from an estimated 868,000 tonnes in 2015).

This would also imply that Indonesia is set to replace India as the world's largest palm oil consumer. India is estimated to have consumed 7.2 million tonnes of palm oil in 2015.

Sinaga stated that, due to higher domestic consumption, Indonesia's CPO exports will decline to 21 million tonnes in 2016. The 2015 CPO exports are estimated at 23 million tonnes in terms of volume or US\$20 billion in terms of value.

The DMSI has also revised downward its prognosis for Indonesia's palm oil production in 2016, to 30.8 million tonnes, from 31.5 million tonnes in 2015, due to *El Nino*-induced dry weather.

Source: Indonesia Investments, Dec 31, 2015

This is an edited version of the article.

Creativity – Role of Other People, Part 2

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Make ideas work

In Part I of this topic, I talked about the importance of creativity in branding, and how sometimes all it takes is just one individual to come up with good ideas which help build a brand. In fact, a single idea can transform the success of an entire product range or commodity.

Branding

Creativity is a big topic for the individual, and it is similarly big when it comes to the creativity of groups. Either way, creativity is important and mostly under-rated in any business, but I think there's a particular need for more and better creativity in the world of oils and fats for many reasons.

Firstly, it is an industry that has had so little creative input in the past. Secondly, and not many people like hearing it, the fact remains that for the buying public, edible oils and fats just aren't that interesting. But the matter need not rest there.

Having a good attitude to branding isn't so much about hoping people are interested in your brand – it's about doing things which make your audience motivated. And few ways of motivating an audience are more cost-effective than being creative – quite often, good ideas cost nothing.

Individuals can do a lot on their own, but groups can be great, too. This is good news for the oils and fats industry, as it has many groups and some of them are very large. They can all be more creative than they are.

When we think of creativity, it's easy to come up with examples that are to do with individuals. In science, there's Newton and Einstein. With painting, there are Picasso or Monet. For music, there's anyone from Beethoven to Lady Gaga. And with the written word there's yet another almost endless list, from Shakespeare to Stephen King to JK Rowling.

When it comes to groups, it's a bit more of a struggle to find examples. At first glance, it really seems that, for the most part, groups really aren't that creative. How many governments can you think of that produced a medical breakthrough, a religion that produced a famous painting, or a political party that produced a halfdecent play? It's not easy.

Yet, groups do produce creative things. For example, NASA came up with the technologies that put a man on the moon; the Lockheed 'Stunk-works' came up with the FII7 – the world famous first-ever stealth bomber; and Apple came up with the iPad and iPhone.

Big or small groups?

When it comes to creativity there appears to be a massive difference between the capabilities of small groups versus large ones. Groups have a tendency to change and often stifle their members – often without their members realising it. People who work in groups often have to think about many things besides their own creative efforts, such as:

- The lure of appreciation
- The greed of promotion

- The shame of humiliation
- The fear of demotion
- Hierarchies, and bosses to worry about
- Knowing what pet projects are 'in favour' and what to avoid
- Working around other people's worries, insecurities, or stuff they might find offensive

When it comes to the oils and fats industry, there's no decision to be made. You either get things done by working with the groups you find yourself in, or you don't get things done at all.

Also, on a more optimistic note, big projects require big numbers of people. A nice illustration of this came my way a few weeks ago when I had a chance conversation with a cyber-security specialist in a large multinational corporation. When I asked him how broad his area was, he pointed out that cyber-security has now become such a big area that there is no way that one person can handle it all.

So, unless your idea of using creativity is to write a novel or a song, then the chances are that you will be working on a project that will require the creativity of more than one brain. On top of that, even if you do find yourself coming up with an idea which is totally the result of one brain, you will almost certainly need to work with other people in order to get that idea implemented. Getting an idea to work, with a group of people, is as important as coming up with the idea in the first place.

In the world of creativity, this last point doesn't get talked about anywhere near often enough. There is always a fascination with the business of coming up with ideas, but the critically important thing is the execution phase. Getting ideas executed via other people is a vastly complex topic. So complex, in fact, that few people are even remotely good at it.

If you are going to achieve big things, the chances are high that you are going to need big groups of people. Projects like a jet airliner, an aircraft carrier or construction of the Shanghai Tower involve thousands of people and their brains. Sure, many of the tasks will be straightforward, but along the way there will be smaller-scale problems to be overcome that require creativity from brains to get the job done. In short, there is too much for a single person. However, there is a lot of information to suggest that big groups aren't big on creativity. If you look at recent innovations that have changed the world, large organisations are conspicuous by their absence:

- YouTube was the great leap forward in terms of video and broadcasting, but it didn't come from CNN or the BBC.
- Google transformed how we get information from computers, but it didn't come from IBM.
- PayPal and Bitcoin have started to revolutionise how people move money, but these ideas didn't come from banks like HSBC, Barclays or Goldman Sachs.
- SpaceX and Blue Origin are pioneering 100% reusable spacecraft, an innovation that could have come from NASA or any of the many governments.
- Tesla electric cars became the biggest selling car in Norway in 2015, yet this new step (in what is conceptually an old technology) didn't come from Ford, General Motors or Chrysler.



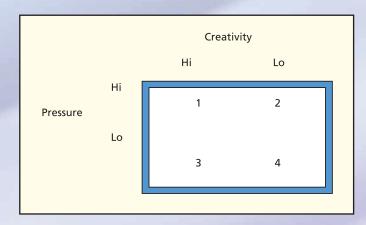
Fortunately, when it comes to getting groups to be creative, there are many lessons to be learned from the successes, with a natural example being Apple. It became good at coming up with new ideas because Steve Jobs was accepting of failure. As the story goes, he would praise attempts that failed as well as attempts that succeeded.

And it's not just Jobs who found this approach successful – many others have too. There is a certain solid logic to it and it goes like this: if you have a reasonably intelligent approach to ideas, then you know that there'll be a fairly constant, or reasonably constant, ratio of success to failure. If that's so, then your number of failures is just as much a measure of your success as your number of successes.

The most common example of this is 'closing ratios' in the case of the salesperson getting sales. If 10 attempts at a sale result in one successful sale, then that's a closing ratio of 10%. And most salespeople in any industry have a reasonably constant closing ratio. So, if that salesperson has a year-end goal of 'so many sales' or 'so many dollars in commission', then each failed attempt at a sale is just as much a measure of success as a successful attempt.

The pressure paradox box

One thing you can do as a manager is apply pressure to your workforce by saying things like "We need an answer to this" or "We'll go out of business soon if we don't solve this" or – and I wish I were joking here – "Come up with some good ideas or you're fired". The problem is: sometimes pressure works, and sometimes it doesn't. Consequently, you end up with a box.



 Quadrant I – 'necessity is the mother of invention' zone It is best typified by the pressure that happens in war time. The pressure of World War II brought the world the nuclear age, the jet aircraft, radar and the first electronic computers. • Quadrant 2 – demoralised workers

This is where the boss is a bully who pushes and punishes and gives little positive feedback. So the workforce feels offended and shifts gear from being creative to 'just getting through the day'. The funny thing is that there is actually quite a lot of creativity in Quadrant 2; it's just that it's more along the line of finding creative excuses for why none of the work is getting done.

Quadrant 3 – blue sky dreaming

Particularly in high-tech organisations, there will often be groups of people working on ideas with no immediate relevance to day-to-day business. Often their goals are diffuse, and the timelines equally so. For groups like this to work well, there needs to be a special kind of worker with a special kind of boss.

Xerox Corp was a good example of this with the work at its PARC site in the US, which produced the first personal computers, the icon and the mouse (none of which Xerox really developed).

• Quadrant 4 – lazy and clueless

With the wrong workers, the wrong bosses and the wrong concepts, Quadrant 4 situations can happen. But they don't happen for very long. Groups like this simply can't survive. They are neither productive nor fun to be in. Consequently they are shut down for the former reason, or people quit for the latter.

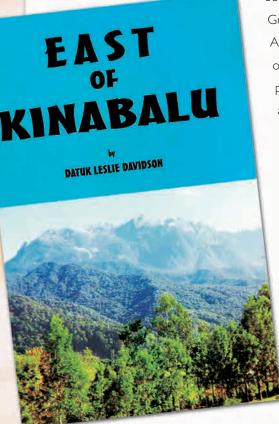
Groups can be made to be creative, but there are few, if any, quick fixes. But with the right combination of open-mindedness and patience, groups can really do well. A good example of this was the DuPont Corporation in the early 20th century when it was looking for a 'synthetic silk', which we now know as nylon.

Bosses found Wallace Carothers, a chemist who wasn't exactly social and suffered a good deal from depression, who turned down many of their offers. But DuPont persisted, giving him a free rein and a large amount of freedom. The result was a multibillion dollar, ground-breaking technology in materials.

> Dr Ian Halsall Author & Researcher

Part 1 of this article appeared in the previous issue.

St Andrews Storm, Part 2 A boiling maelstrom



Some 12 hours later than anticipated, we were speeding up the Gum Gum Creek. The engines were going well. The steering was perfect. Again I took the wheel. Tundah sat on the front deck, to keep an eye out for sinkers. As we came out into the estuary, Tundah resumed his position at the wheel. Our mechanic friend had been right. It was almost dark. It was low water again, and the tide was starting to flow.

From the Gum Gum estuary to the small fishing village of Kulapis, which marked the entrance to Labuk Bay, we had to follow the north-facing shore of the Sandakan peninsula. Because it was low tide, my idea of hugging the shore-line was impossible. To avoid the mud banks, we had to go about two or three miles offshore before turning into the deeper channel which was normally used by large kumpits and timber-tugs.

Tundah took us straight out to sea in the semi-darkness. We were running head-on into the waves. The wind was strong and it came straight out of the Sulu Sea from the north-east. It funnelled in and drove the waves against the sloping north

shore. A few miles to the east lay the Turtle Islands, and beyond them, the western islands of the Philippines archipelago.

There was a brisk chop but the *Pekaka* cut through it in fine style, throwing up a spray every time we crashed into an incoming wave. It was an exhilarating run. The wind snatched at my hair, blowing away the last vestiges of my hangover. The stars were beginning to appear overhead. Two phosphorescent plumes of water from our propellers arched out behind us as we carved our way towards Kulapis.

Peering into the darkness ahead, Tundah eased back sharply on the throttles. I could just make out the blacker outline of a fishing *kelong*, which marked the edge of the deeper channel. *Kelongs* were long nibong poles which were sunk into the sea bed on which the prawn-fishermen suspended their nets. They carry

no lights of course, and like the sinkers, they are a major hazard to coastal shipping travelling at night.

Tundah was enjoying himself. He was a Banjar, a member of that famous sea-going race. He was completely fearless in the water and his courage was shortly to be put to the test. He eased the *Pekaka* round the *kelong* in a wide sweep and brought it on to a course running parallel to the far-off shore-line. The moon had not yet emerged. However in the dim light of the stars we could just make out the darker line of the mangroves far away on our port side. Ahead of us we could see the lights of Kulapis twinkling in the distance.

The storm hit us suddenly! Tundah shouted and pointed ahead. The lights of Kulapis and half of the stars were blotted out by an immense black wall, which seemed to be advancing towards us with the speed of an express train. Tundah handed over the steering to me and grabbed for his torch. I was momentarily disorientated. It looked as if we were running into the forest wall on the shore, but the shore-line was at least two miles away.

It was in fact, a solid wall of rain. There was no time for further speculation. We had run straight into a violent tropical storm which seemed to have come out of nowhere. We heard later that it was the tail-end of a typhoon from the South China Sea a hundred miles to the north.

Almost instantly the sea was whipped up into a boiling maelstrom. It was absolutely pitch dark. I remember holding up my hand in front of my face, and I could not see it. The wind tore at us with an insane shriek. It drove the rain and spray horizontally at us with a fury that stung our faces. Peal after peal of thunder rolled around and every few minutes we were lit by flashes of lightning.

The *Pekaka* was being tossed around like a piece of driftwood. For what felt like seconds at a time, we seemed to be climbing, and then we would hit the water with a shuddering crash, which made me wonder if the plywood hull might split from end to end. It was made much worse by the complete darkness, lit only by frequent flashes of lightning. With the thunder, and the howling of the wind normal speech was impossible.

Trial and error

Tundah was shouting, close to my ear: "You drive ... I look out ... *kelongs.*" My God, he was right. If we hit a *kelong* while being flung around like this, the plywood hull would be smashed to matchwood in seconds.Tundah switched on his powerful torch and peered from time to time round the edge of the windscreen. Through the glass we could see nothing. It was awash. I was standing in a half-crouch, so that I also could take fleeting glances over the top of the windscreen. Even then, the torch was not of much benefit.

By the flashes of lightning however we could see short glimpses of huge green walls of water towering over us one minute, and then we were teetering over a black void the next. For the first few terrifying minutes the waves seemed to come from all directions. I had a confused impression that we were spun completely round on a couple of occasions as the waves broke around us. I had lost all sense of direction.

The *Pekaka* started to keel over at an impossible angle as we slid off the larger waves. It was a surely a matter of minutes before we turned turtle. "Turn head into...... waves!" shouted Tundah and shone his torch to starboard. It seemed that the worst of the waves were indeed now coming more consistently from that direction.

To turn her round was not easy however. I eased down on the throttles. Almost immediately a green wave broke over our transom with a shuddering crash. In the next lightning flash I had a glimpse of Ah Chang, clinging desperately to his umbrella under a shower of spray. It was quite obvious that if we tried to run very slowly, we would either founder or the engines would be swamped.

Finally however, we were now heading directly into the waves at last. Our progress was curious. We seemed to climb with agonising slowness up, up, on the face of the oncoming wave. At the top we stopped dead, as if a giant hand had grabbed us from behind. Then we lurched down into the darkness and smashed into the next wave.

A sort of pattern was beginning to emerge however. By trial and error I found that I could influence our progress to some extent by the use of the throttles. I pushed them fully forward as we were climbing, then pulled back to slow us down as we passed the crest. If I was too slow, water surged over her transom again, and if I was too fast, the *Pekaka* buried her nose in the next wave.

The wind seemed to be abating slightly. The waves, when we glimpsed them in the light of the torch, or in the odd flash of lightning, were still terrifying but the *Pekaka* had stayed afloat so far. I wondered if we were perhaps at the epicentre of the storm. I took the opportunity of the lull to shout to Tundah and Ah Chang: "We're heading in towards the shore. If we hit the mangroves jump out. Grab on to a tree." "No, Tuan," Tundah shouted, "we are heading out to sea – to the Philippines!" Ah Chang said nothing. A flash of lightning revealed him sitting on the bottom of the boat, in six inches of water, eyes tightly closed, clinging resolutely to the wreckage of his umbrella. For his very first boattrip, Ah Chang was getting his money's worth!

Full circle

My eyes were red and stinging with the salt water. Outside the little cocoon formed by our torch we could see nothing. The wind started to pick up again. We were once again being tossed this way and that. Neither Tundah nor I could have the remotest idea of the direction we were travelling.

Suddenly Tundah shouted in my ear. "Awas (danger), Tuan." He pointed with his torch. Straight ahead of us was the black post of a *kelong*. I pushed the throttles full open almost instinctively and spun the wheel. "Jump!" I shouted, "grab the *kelong*."

It was too late. The *Pekaka's* stern spun round. We caught a glancing blow along our side. We surged forward on the next wave, and the *kelong* disappeared in the darkness behind us. In the light of Tundah's torch I saw that we were diving at full speed into a huge green wall of water.

I pulled savagely back on the throttles to slow us down. It had no effect. The *Pekaka* dived deep into the wave. As it hit us, I pushed the throttles full open again, clinging tightly to the steering wheel with one hand. The throttle probably saved us. There was a thunderous crash as tons of water landed on us. The windscreen took the brunt of the blow. After an agonising second, the powerful 60hp Mercury engines drove us forward and upwards and the *Pekaka* shook herself free of the wave. I eased the throttle back again. Half the windscreen was hanging off. Tundah's torch had disappeared. With the next flash of lightning, I could see that both Tundah and Ah Chang were mercifully, still in the boat. We must now be very close to the end however. The wind was increasing to its former fury. We were travelling in complete darkness except for the lightning flashes.

Without the protection of the windscreen, if we went under again, we would not come up. Needless to say, we had no buoyancy tanks. The Sandakan harbour-master had warned us that the *Pekaka* was unsuitable for anything but river travel. It was now half-full of water, but strangely it seemed to handle better. It lurched drunkenly, and wallowed in the troughs, but it no longer tried to bury itself in the oncoming waves.

The danger now was that we would founder. I heard Tundah shouting in the darkness to Ah Chang to help him to bale but there was no reply. Tundah applied himself frantically to scooping water over the side.

Suddenly he stopped baling and grabbed my arm. "Look Tuan, over to the right," he shouted in my ear. I could see a dim point of light. I was puzzled. It looked something like a firefly. It jumped around, up and down and from side to side.

"Kulapis," Tundah shouted. I gradually eased the sluggish *Pekaka* round to head directly for the light.

It was not Kulapis. As we got closer we realised that it was the stern light of a large 50-ton kumpit. It was at anchor, but it was being flung around on the waves like a toy. We approached it cautiously in case we were dashed against its side. We hailed it from a distance of about 10 feet.

A startled Chinese face appeared above us from a cabin in the stern. He peered at us disbelievingly. Appearing as we did in the darkness, out of the sea, in the teeth of the storm, in our tiny speed-boat, we must have come as something of a shock to him.

"Where are we?" I shouted.

"Gum Gum," he replied.

"Where?" I asked.

He looked at us stupidly. "Gum Gum *lah*!" he shouted again.

"Mana? (Where is the Gum Gum River?)" I shouted back.

"Sini," he said and pointed to the other side of his kumpit.

A few more yards in the *Pekaka* and we realised that we were indeed in the Gum Gum estuary or as close to it as a large kumpit could risk anchoring. A hundred yards or so further in the direction he had indicated, the waves died away. We had reached the safety of the creek.

The wind dropped and the clouds parted. A huge moon appeared above the mangroves which lined the creek. We tied up to a branch and took stock of our position. There was still, in spite of Tundah's energetic efforts with the baler, about a foot of water slurping around in the bottom of the boat. Ah Chang sat in it as if he was taking a bath. His face was white and he looked ghastly in his bedraggled white uniform. He was still clinging on tightly to the side of the boat with both hands in a state approaching cataleptic shock. His umbrella had gone, as had the cane chairs and most of our provisions. The *Pekaka* had a gash down its side where we had grazed the *kelong*. Tundah looked at me and laughed.

Suddenly the flow of adrenalin ebbed. I was overcome with an immense weariness. I lay down across the length of the wooden bench in my sodden clothes and fell into a deep slumber. It was the first real sleep I had had for nearly 40 hours.

I was awakened by Tundah shaking me by the shoulder. We were back at the Gum Gum jetty. The three of us trudged silently in single file, dripping wet, down the moonlight track to the main road. It was distinctly chill in our wet clothes.

Stern resolve

It was quite late when we reached the tarred road. There was no traffic. We approached an isolated Chinese shophouse on the roadside, and banged on the door. At the best of times the rural Chinese are not always noted for their charity to travellers in distress. Recently however there had been a few pirate attacks in the coastal areas. There was no way a Chinese shopkeeper was going to open his door to a bunch of suspicious characters appearing out of the night. The doors and windows remained firmly locked and shuttered.

We plodded on miserably for a mile or so further down the road until we came to another wooden Chinese house built on stilts. We had the same reception. It began to look as though we might have to walk all the way back to Sandakan town.

The prospect did not appeal to any of us, but it was apparently especially repugnant to Ah Chang. He sprang into action. He suddenly changed from an inscrutable Oriental Buddha into a very scrutable Chinese devil. He leapt at the door, banged on it with his fist. He directed a violent stream of Hainanese invective at it. Fortunately perhaps, I could not understand a word.

It had no effect. The door remained firmly closed. A battered pick-up truck stood in the drive. I tried its doors. It was locked. Tundah and I turned to leave, but Ah Chang was made of sterner stuff. He returned to the house, banged on the door again until it rattled, and once again unleashed a furious tirade.

Silence descended. The door remained firmly closed, but a carkey slowly inched its way out from underneath. We opened the old banger, and climbed in. After one or two attempts I got it started and we were on our way to Sandakan.

"Very nice people to lend us their car," I said.

"Not nice people, Master," said Ah Chang in what was the longest speech he ever made to me. "I tell them – I no get car key, I take petrol from car and burn house down." Obviously, I thought, he was a more redoubtable operator on *terra firma* than on the water.

Ah Chang continued to prove himself a man of stern resolve and firm decision. When we reached the town, he disappeared swiftly, and we never set eyes on him again. He did not even attempt to collect his one day's pay.

Publications

Perhaps he thought we might charge him for the boat-trip.

Tundah and I returned to the estate early the following morning, delivering back the Chinese shopkeeper's car enroute, along with an envelope containing a suitably handsome hire-fee. We travelled from the Gum Gum jetty to the estate in a hired canoe. When we came into the bay, the sea was glassy-calm.

"You would not believe it, but it can get very rough sometimes at this season," said the canoe owner, "especially in the late afternoon." Tundah and I said nothing.

The *Pekaka* was, alas, a write-off, except for its outboard engines. I placed an order with Kwong Borneo for a much larger and more stable fibreglass catamaran. By the time *Pekaka II* arrived, Tundah had been promoted to be the captain of one of our large cargo kumpits.

To replace him as our outboard driver, we selected his friend Jalil Baguing. Jalil was an intelligent worker, and one of my favourite characters among the original pioneers whom we recruited from Tawau on my very first visit. Needless to say, Jalil was more adept with machinery than Tundah had been.

When I returned to the Labuk on a personal visit 30 years later, after I had retired from Unilever, I was reunited with both of them. It might be worthwhile having a flash-forward to recount something of their successful further careers, since they illustrate very well both the calibre of some of our pioneer workers, and the benefits the oil palm has brought to the people of Borneo. Tundah married a Kadazan girl, and he eventually became a Land Rover driver with the Sabah Land Development Board (SLDB). When he retired, he opened a shop on the Labuk, well situated between the SLDB estates and Tungud estate. I visited them and had tea with them in the shop which was obviously doing very good business.

Their half a dozen children and grandchildren crowded around while Tundah recounted the tale of the big storm. Their oldest son had become the headman of the district, and Tundah himself was a leading patriarch in the Labuk Kadazan community.

Jalil also had a very successful career. He graduated from driving our outboard craft to driving one of our tractors. From there he bought a tractor of his own, and became a very successful transport contractor for SLDB. I visited him in his home on the outskirts of Sandakan. He was now Haji Jalil since he had been on the haj several times.

He had married a Sino-Kadazan nurse. They had four daughters, all of whom had been sent to the University of Strathclyde to complete their education. Haji Jalil told me with great pride that one of them was a doctor, one a dentist, one an accountant, and the youngest was a personnel manager in a large company.

Datuk Leslie Davidson Author, East of Kinabalu Former Chairman, Unilever Plantations International

This is the second part of an edited chapter from the book published in 2007. It can be purchased from the Incorporated Society of Planters; email: isphq@tm.net.my

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